



CITY OF MANCHESTER.

REPORT

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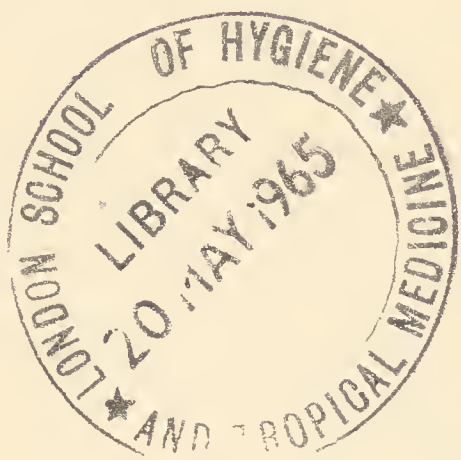
Health of the City of Manchester,

1937,

BY

R. VEITCH CLARK, M.A., M.B., CH.B., B.Sc., D.P.H.

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(1881)

PUBLIC HEALTH DEPARTMENT,

TOWN HALL,

MANCHESTER, 2,

6th August, 1938.

MY LORD MAYOR, ALDERMEN,

AND MEMBERS OF THE CITY COUNCIL.

I have the honour to submit my report on the health of the City for the year 1937, which has been compiled in accordance with the memorandum of the Ministry of Health.

The following are the principal facts in the general vital statistics for the year :—

Population.

The estimated population to the middle of 1937 is 751,371, of which 354,019 are males and 397,352 are females.

Marriage Rate.

The marriage rate for the year is 19·1. This is an increase of 1·4 on the rate for 1936 and is 2·0 higher than the average for the last five years.

Birth Rate.

The birth rate (14·3), is the lowest recorded. It is 0·4 lower than the previous year and 0·5 lower than the average for the last five years.

Death Rate.

The death rate is 13·5, and is the same as the rate in 1936. The average death rate for the past five years is 13·0.

Infantile Mortality.

The rate of 76·2 per 1,000 births is 1·1 lower than the previous year, the average for the past five years being 75·6.

Maternal Mortality.

The maternal mortality rate of 4·19 is 0·79 lower than in 1936 and 0·06 lower than the average of the past five years.

Cancer.

The cancer death rate of 1·66 is 0·04 higher than the previous year and 0·05 higher than the average for the past five years.

Tuberculosis.

The death rate from all forms of tuberculosis during the year is 1.04, as against 1.01 in the previous year. The average death rate for the previous five years is 1.10. The death rate for pulmonary tuberculosis is 0.88. The death rate from non-pulmonary tuberculosis 0.16.

Every section of the report contains material which would be worthy of more extensive and detailed critical analysis. This may readily be done by those interested in the individual subjects dealt with. It is, however, felt that one particular section merits mention here. On page 69 is given a critical survey of "Survival Factors in Pulmonary Tuberculosis," by Dr. D. P. Sutherland. This admirable summary is of special value at the present time. It is not only scientifically informative, but administratively is another evidence of the very valuable and constructive work being done in the city in the control of one of the greatest of our scourges. The continued and almost massive fall in the death rate and incidence of tuberculosis during the past forty years, in itself demonstrates the value of this section of preventive medicine. The specific group of cases dealt with by Dr. Sutherland is of marked interest, as they were originally of an acute type and demonstrate the efficacy of the anti-tuberculosis scheme. During the past seven years our grip upon tubercle in the city has been greatly strengthened by the opening of the Children's Sanatorium at Abergele, by the transfer to the city and the consequent closer surveillance of the tuberculosis wards in Withington Hospital, and by the extension of Baguley Sanatorium, now in process of construction. The critical analysis of long-period cases now produced by Dr. Sutherland is further evidence—if such were needed—of the wisdom of the city in its continued attack upon this disease.

I have the honour to be,

Your obedient Servant,

R. VEITCH CLARK,

Medical Officer of Health.

PUBLIC HEALTH COMMITTEE,

1937-38.

Chairman :

Councillor S. MEADOWCROFT

Deputy Chairman :

Alderman R. S. HARPER, J.P.

THE LORD MAYOR

(Alderman J. C. Grime).

Alderman W. T. Jackson, M.A., J.P.	Councillor T. Harrison
„ A. James, J.P.	„ M. L. Kingsmill Jones, O.B.E., J.P.
„ Annie Lee, J.P.	„ T. M. Larrad, J.P.
Councillor Nellie Beer	„ Sarah Laski
„ A. Cathcart	„ J. H. Meachin, J.P.
„ Dr. W. Chadwick	„ W. Onions, J.P.
„ R. G. Edwards, J.P.	„ H. A. E. Ramsden
„ F. Farrington	„ W. Somerville, J.P.
„ Mary A. Gibbons	„ Professor F. E. Tylecote, J.P.
„ W. N. Griffin	„ J. Watts
„ W. Hallows	

GENERAL STATISTICS

The following are general statistics for the year 1937 :—

Area of the City in acres	27,257
Census population for the year 1931	<div style="display: inline-block; vertical-align: middle;"> { Males .. 360,976 } { Females .. 405,402 } </div> <div style="display: inline-block; vertical-align: middle; margin-left: 10px;"> 766,378 </div>
Estimated population at the middle of year 1937	<div style="display: inline-block; vertical-align: middle;"> { Males .. 354,019 } { Females .. 397,352 } </div> <div style="display: inline-block; vertical-align: middle; margin-left: 10px;"> 751,371 </div>
No. of persons per acre	28
Persons married per 1,000 of population	19.06
Live Births in the City of Manchester..	<div style="display: inline-block; vertical-align: middle;"> { Males .. 5,547 } { Females .. 5,207 } </div> <div style="display: inline-block; vertical-align: middle; margin-left: 10px;"> .. 10,754 </div>
Live birth-rate per 1,000 of population	14.31
Still-births	<div style="display: inline-block; vertical-align: middle;"> { Males .. 247 } { Females .. 221 } </div> <div style="display: inline-block; vertical-align: middle; margin-left: 10px;"> .. 468 </div>
Deaths	<div style="display: inline-block; vertical-align: middle;"> { Males .. 5,095 } { Females .. 5,062 } </div> <div style="display: inline-block; vertical-align: middle; margin-left: 10px;"> .. 10,157 </div>
Recorded annual death-rate per 1,000 of population	<div style="display: inline-block; vertical-align: middle;"> { Males .. 14.39 } { Females .. 12.74 } </div> <div style="display: inline-block; vertical-align: middle; margin-left: 10px;"> .. 13.52 </div>
Deaths under 1 year of age per 1,000 births	76.16
Excess of registered births over deaths	597
Percentage of mortality occurring in public institutions ..	53.91

No. of occupied Structurally Separate Dwellings at the Census in April, 1931	177,430
No. of persons per occupied Structurally Separate Dwelling (Census 1931)	4.32
No. of persons per house 1937 (Based on 204,010 houses connected with the water supply within the City)	3.68
No. of new houses erected during 1937 :—	
By Local Authority	1,743
By other bodies or persons	1,956
	3,699

PUBLIC HEALTH OFFICERS.

(A) MEDICAL.

Medical Officer of Health R. Veitch Clark, M.A., M.B., CH.B.,
B.SC., D.P.H.

Deputy Medical Officer of Health .. W. St. Clair McClure, M.R.C.S.,
L.R.C.P., D.P.H.

Senior Tuberculosis Officer D. P. Sutherland, M.B., B.S.

Assistant Medical Officer of Health—
(Hospitals etc.) J. S. Taylor, M.D., D.P.H.

Assistant Medical Officer of Health—
(Maternity and Child Welfare).. Nora F. Smith, M.B., B.S., D.P.H.

Assistant Medical Officer of Health—
(Housing) A. M. M. Grierson, M.D., D.P.H.

Assistant Medical Officer of Health—
(General) C. F. Lynch, M.B., B.CH., B.A.O.,
D.P.H.

Assistant Tuberculosis Officers	5
Medical Officers, Child Welfare Centres (whole time) ..	9
„ „ „ (part-time)	10
Dental Surgeons (part-time)	2

Abergele Sanatorium.

Medical Superintendent—J. E. Geddes, M.D., CH.B.

One Deputy Medical Superintendent and one Resident Assistant
Medical Officer.

Baguley Sanatorium.

Medical Superintendent—H. G. Trayer, B.A., M.B., CH.B. D.P.H.

One Deputy Medical Superintendent.

Two Resident Assistant Medical Officers.

(A) MEDICAL—*continued.**Monsall Hospital.*

Medical Superintendent—D. Sage Sutherland, M.D.

One Deputy Medical Superintendent.

Four Resident Assistant Medical Officers.

Booth Hall Hospital.

Medical Superintendent—W. H. Patterson, M.D., D.C.H.

One Deputy Medical Superintendent.

One Resident Surgical Officer.

Four Resident Assistant Medical Officers.

Withington Hospital and Institution.

Medical Superintendent—M. Gamble, M.B.E., M.D.

One Deputy Medical Superintendent.

One Resident Surgical Officer.

One Resident Obstetrical Officer.

One Assistant Resident Obstetrical Officer.

Six Resident Assistant Medical Officers.

Crumpsall Hospital and Institution.

Medical Superintendent—W. A. Ramsay, M.A., M.D.

One Deputy Medical Superintendent (with surgical qualification).

One Senior Resident Medical Officer.

One Resident Obstetrical Officer.

One Assistant Resident Obstetrical Officer.

Six Resident Assistant Medical Officers.

One Resident Assistant Medical Officer for the Institution Mental Wards.

Langho Colony.

Medical Superintendent—J. Shearer, M.B., CH.B.

In addition, there are the consulting staffs of these various hospitals.

District Medical Officers under Poor Law Acts	28	} Chiefly combined appointments.
Public vaccinators	26	

(B) OTHERS.

Lay Administrative Officer—George Ogden, F.C.C.S.

Chief Clerk—David Egerton, M.R.INST. P.H.H.

Veterinary Surgeon—Richard C. Locke, M.R.C.V.S.; D.V.S.M. (VICT.).

Public Analyst—Harri Heap, M.SC., F.I.C.

,, (Assistant)—Alfred N. Leather, B.SC. (LOND.), F.I.C.

Sanitary Inspectors.

Chief—Isaac Priestley, M.R.S.I., F.S.I.A.	I
Divisional	2
Senior Housing	I
Housing	8
Special to the Medical Officer of Health	2
Drainage	2
Food and Drugs	3
Smoke	4
Rat Officers	2
Canal Boats	I
Milk Control	3
House Drainage	2
District	46
Poisons and Pharmacy Act and Rag flock	I
Houses-let-in-lodgings	4
Women, Workshops, etc.	2
Shops Act	3
Total	87

Maternity and Child Welfare.

Superintendent of Health Visitors	I
Assistant Superintendents of Health Visitors (one of whom is part-time tutor to H. V. Training Course	2
Inspector of Midwives	I
„ „ (Assistant)	I
Municipal Midwives	53
Maternity Nurses	4
Ophthalmic Nurses	3
Centre Superintendents	16
Health Visitors	61
Cleansing Nurse	I
„ (Part-time)	2
Masseuses	9
Total	154

Tuberculosis.

Sanitary Inspectors	3
Nurses	13
Vaccination Officers	4

METEOROLOGY, 1937.

CITY OF MANCHESTER (299, OLDHAM ROAD). (Means of the Monthly Readings.)

	Barometer	Dry Bulb	Wet Bulb	Humidity	Maximum Temperature	Minimum Temperature	Mean Temperature in Shade	Sun Maximum	Grass Minimum	One Foot	Four Feet	Total Rainfall (inches)	Total No. of Wet Days	Total Hours of Sunshine	Average Mean Daily Temperature 1881-1915 (extracted from the book of normals)	Average Rainfall 1892-1937	Average Hours of Sunshine 1892-1937	Fog Noted
January ..	29.714	42.2	40.1	82	46.3	38.9	42.5	54.0	37.6	41.9	44.9	2.79	23	5.9	39.1	3.07	11.1	14th, 15th.
February ..	29.502	41.2	39.7	87	45.4	38.2	42.2	62.9	36.5	40.4	43.6	5.24	26	24.5	40.1	2.43	29.8	12th, 17th, 18th.
March ..	29.604	38.6	36.3	78	43.7	34.4	39.4	72.5	32.2	38.0	42.2	1.31	19	61.6	42.3	2.33	72.3	10th.
April ..	29.819	48.4	45.7	80	55.0	43.9	49.7	83.4	42.2	46.4	44.8	2.64	17	73.3	46.8	1.97	113.3	—
May ..	29.980	55.1	51.1	75	62.6	48.6	55.0	98.6	46.3	52.9	49.8	2.14	19	121.6	52.6	2.28	143.2	17th.
June ..	30.014	58.8	54.0	72	65.1	52.6	59.2	104.0	48.5	59.7	55.7	1.51	18	105.4	58.4	2.41	150.8	—
July ..	29.938	61.3	57.4	78	68.9	55.9	61.4	100.7	52.1	62.0	58.9	2.13	20	79.7	60.8	2.96	138.2	—
August ..	30.035	63.9	58.8	73	72.4	56.8	64.1	108.8	51.7	63.4	61.0	2.69	13	148.5	59.9	3.55	120.2	—
September ..	29.882	57.0	53.1	76	63.9	51.3	58.1	96.8	46.5	58.1	59.9	1.11	17	96.1	56.4	2.69	98.7	25th.
October ..	29.961	51.1	48.6	82	56.8	47.2	51.4	78.3	40.7	52.7	56.4	1.67	11	45.0	49.8	3.51	55.1	4th, 12th, 13th, 18th, 19th, 20th.
November ..	30.034	41.4	40.0	87	46.7	39.2	42.9	58.5	33.7	43.6	51.1	2.14	11	20.9	43.6	3.01	18.0	21st, 28th.
December ..	29.856	38.5	37.3	88	41.9	35.2	39.3	48.7	32.1	38.7	44.8	2.10	22	9.7	40.4	3.35	7.0	5th, 11th, 12th, 13th, 14th, 15th, 16th, 20th, 24th, 25th.
YEAR ..	29.862	49.8	46.8	80	55.7	45.2	50.4	80.6	41.7	49.8	51.1	27.47	216	792.2	49.2	33.56	95.77	6th, 7th, 8th, 18th, 19th, 25th, 26th, 27th.

The extent to which Institutions are used is to some extent represented in the following table :—

TABLE I.
DEATH RATES IN THE HOMES OF THE PEOPLE AND IN INSTITUTIONS
FOR 5 YEARS 1933-1937.

YEAR	Estimated Populations to middle of Year	Death-rate per 1000 of persons dying in their own homes	Death-rate per 1000 of persons dying in Institutions	Total death-rate per 1000
1933	771,165	7.0	6.4	13.41
1934	773,593	6.2	6.0	12.24
1935	776,028	6.3	6.6	12.91
1936	759,058	6.4	7.1	13.50
1937	751,371	6.2	7.3	13.52

The chief causes of death are shown below for each of the years 1932-1937 :—

TABLE 2.

	1932	1933	1934	1935	1936	1937
Tuberculosis of the Lungs ..	770	773	751	711	671	664
Tuberculosis (other forms) ..	126	114	125	95	109	119
Diseases of the Heart	1747	1961	1728	1697	1881	1944
Cerebral Hæmorrhage, Apoplexy, Hemiplegia	449	362	366	403	354	277
Pneumonia	905	841	664	769	777	715
Bronchitis	531	551	380	460	508	452
Digestive Organs	354	361	346	376	389	399
Atrophy, Debility (Chiefly in infants)	28	22	32	37	31	17
Old Age	361	353	426	625	660	662
Premature Birth	229	227	207	236	234	213
Nephritis and Bright's Disease ..	289	261	257	226	271	233
Convulsions	44	21	32	30	26	36
Inflammation of the Brain ..	25	25	24	28	15	16
Diarrhœa and Dysentery	116	97	132	86	73	81
Measles	122	48	97	98	121	45
Scarlet Fever	18	16	14	15	10	9
Whooping Cough	80	47	35	46	47	53
Diphtheria	80	85	84	57	92	90
Influenza	181	536	89	221	128	304
Malignant Disease	1258	1175	1237	1306	1250	1247

TABLE 3.

Gains and Losses in 1937 per 1,000 persons living, as compared with the average for 10 years 1927-1936.

<i>Gains.</i>								
Scarlet Fever	..	..	..	..	..	..	..	0·01
Measles	..	..	..	..	..	..	..	0·08
Whooping Cough	..	..	..	..	..	..	..	0·04
Erysipelas	..	..	..	..	..	..	..	0·02
Phthisis	..	..	..	..	..	..	..	0·07
Tubercular Peritonitis: Tabes Mesenterica	..							0·02
Tubercular Diseases (other)	..	..	..	..				0·01
Premature Birth	..	..	..	..	..	..	..	0·03
Nervous Diseases	..	..	..	..	..	..	..	0·08
Bronchitis	..	..	..	..	..	..	..	0·32
Pneumonia	..	..	..	..	..	..	..	0·25
Other Respiratory Diseases	..	..	..	..				0·01
Enteric Fever	..	..	..	..	..	..	..	0·01
Rheumatic Fever	..	..	..	..	..	..	..	0·01
Diarrhœa	..	..	..	..	..	..	..	0·09
Total								<u>1·05</u>
<i>Losses.</i>								
Influenza	..	..	..	..	..	..	..	0·01
Diphtheria	..	..	..	..	..	..	..	0·02
Digestive System	..	..	..	..	..	..	..	0·07
Cancer	..	..	..	..	..	..	..	0·11
Diseases of the Heart and Blood Vessels	..							0·62
Old Age	..	..	..	..	..	..	..	0·27
Total								<u>1·10</u>
Balance of Losses from above Causes	..	..						0·05
„ „ all Causes	..	..						0·15

INFANTILE MORTALITY.

TABLE 4.

Deaths per 1,000 Births at the ages 0-2 months, 3-5 months, and 6-11 months in successive years.

YEARS	Months of Age			
	0-2	3-5	6-11	Under 1 year
1891-1895 (mean) ..	82.79	41.99	62.97	186.75
1896-1900 (mean) .	83.44	42.43	66.28	192.16
1901-1905 (mean) ..	81.02	37.52	54.24	172.78
1906-1910 (mean) ..	73.89	29.12	44.27	147.28
1911-1915 (mean) .	69.23	24.38	39.26	132.88
1916-1920 (mean) ..	58.46	17.72	28.65	104.82
1921-1925 (mean) ..	52.46	15.63	27.38	95.45
1926-1930 (mean) ..	49.77	15.76	22.33	87.86
1931-1935 (mean) ..	49.01	11.92	15.97	76.90
1933	48.93	11.25	14.75	74.93
1934	45.29	10.91	12.83	69.03
1935	48.42	10.11	12.77	71.30
1936	48.60	12.52	16.14	77.26
1937	48.35	13.86	13.95	76.16

Table 5 allows a comparison with former years in respect of the infantile mortality rates from different causes for the whole of the first year of life.

TABLE 5.

CITY OF MANCHESTER.

CAUSES OF DEATH	DEATHS UNDER ONE YEAR PER 1,000 BIRTHS					
	1932	1933	1934	1935	1936	1937
All causes	85.41	74.93	69.03	71.30	77.26	76.16
Smallpox .. .. .	..	..	..	..	..	..
Chickenpox	0.42	..	..	..	0.09	..
Measles	2.20	0.63	1.57	1.42	3.26	0.93
Scarlet Fever .. .. .	..	..	..	0.18	0.09	0.09
Whooping Cough.. .. .	2.62	1.62	1.05	1.60	2.29	2.32
Diphtheria	0.25	0.09	..	..	0.18	0.28
Erysipelas	0.42	0.45	0.52	0.44	..	0.19
Tuberculous Meningitis	0.42	0.09	0.70	0.18	0.35	0.46
Abdominal Tuberculosis	0.08	0.18	0.09	0.09	..	..
Other Tuberculous Diseases	0.25	0.54	0.35	0.27	0.35	0.09
Meningitis (<i>not Tuberculous</i>)	0.59	0.27	0.52	0.36	0.44	0.28
Convulsions	3.30	1.80	2.36	2.13	2.03	2.98
Bronchitis	3.81	3.42	1.13	1.60	2.82	1.77
Pneumonia (all forms)	16.40	13.58	7.41	8.78	10.32	12.65
Diarrhoea and Enteritis	8.63	7.83	10.38	6.83	6.09	6.70
Gastritis.. .. .	..	..	..	..	0.18	0.28
Syphilis	1.19	0.54	0.35	0.44	0.26	0.56
Rickets	0.42	0.36	..	0.18	0.09	0.37
Injury at Birth	2.37	2.43	2.27	2.93	3.18	4.09
Atelectasis	2.62	3.06	2.88	2.04	1.23	1.67
Congenital Malformation	7.19	6.92	6.81	7.63	8.38	8.65
Premature Birth	19.38	20.42	18.06	20.93	20.64	19.81
Atrophy, Debility, and Marasmus	2.20	1.89	2.79	3.19	2.73	1.58
Overlying, found dead in bed, and suffocation.. .. .	0.34	0.54	1.05	0.80	1.15	0.46
Other causes.. .. .	9.76	8.19	8.73	9.32	11.11	9.95

PUBLIC ASSISTANCE.

On page 12 a table is shown giving the number of persons who were in receipt of relief from the Manchester Public Assistance Committee during the last week in each month of the years 1936 and 1937.

Cases maintained by or chargeable to the Public Assistance Committee on the 1st January, 1938.

(A) RETURN OF MENTAL CASES.

Institution	Class of Case Maintained	Suffering from Mental Infirmary
1. Establishments		
Belonging to Manchester :—		
Crumpsall Institution	General Hospital and Lunacy	642
Swinton Home	Mentally deficient children..	9
2. County Mental Hospitals :—		
Lancaster	Persons of unsound mind ..	429
Prestwich .. .. .	.. ..	912
Winwick .. .. .	.. ..	546
Whittingham .. .. .	.. ..	236
Rainhill .. .. .	.. ..	165
Other County Mental Hospitals	.. ..	17
The Mary Dendy Home, Sandlebridge, Alderley Edge	Mentally defective adults ..	5
Cumnor Rise Home, Botley, Oxford	Feeble-minded girls	2
Stoke Park Colony, Bristol	} Feeble-minded persons ..	{ 20
Whittington Hall, Chesterfield ..		
Durran Hill House, Carlisle	Mentally defective women .	4
St. Joseph's Home, Sudbury	Feeble-minded young women	1
Total		2,994

THE NUMBER OF PERSONS WHO WERE IN RECEIPT OF RELIEF FROM THE MANCHESTER
PUBLIC ASSISTANCE COMMITTEE DURING THE LAST WEEK IN EACH MONTH OF
THE YEARS 1936 AND 1937.

	1936		1937	
	Indoor	Out-door	Indoor	Out-door
January	3,339	45,689	3,034	41,862
February	3,268	44,662	3,068	41,188
March	3,099	43,444	2,986	40,137
April	3,087	42,951	2,863	31,032
May	3,037	40,720	2,792	30,988
June	3,021	40,242	2,756	29,861
July	3,038	39,896	2,784	29,430
August.. .. .	3,000	39,437	2,730	28,922
September	2,989	39,652	2,742	29,346
October	3,005	40,089	2,717	29,563
November	3,070	40,503	2,754	30,129
December	3,061	40,817	2,825	30,901

TABLES.

1937

TABLE A.—MANCHESTER, 1937.

CAUSES OF DEATH AT DIFFERENT LIFE PERIODS IN THE 52 WEEKS OF THE YEAR.
PERSONS.—(MALES AND FEMALES.)

CAUSES OF DEATH	AGES AT DEATH													
	All Ages	UNDER 5 YEARS		5 to 10	10 to 15	15 to 20	20 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 to 75	75 to 85	85 and upwards
		0 to 1	1 to 5											
All Causes	10157	819	303	138	70	164	205	430	617	1069	1928	2439	1660	315
A.—GENERAL DISEASES.....	3576	548	151	86	38	102	125	219	279	428	658	648	265	29
B.—LOCAL DISEASES.....	5585	242	133	38	25	49	67	175	306	596	1208	1582	991	173
C.—OTHER SPECIFIED DIS...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
D.—ILL-DEFINED DISEASES...	668	19	...	...	...	...	2	2	2	5	17	151	367	103
E.—VIOLENT DEATHS	328	10	19	14	7	13	11	34	30	40	45	58	37	10
A.—General Diseases.														
Smallpox.. { Vaccinated .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
{ Not Vaccinated ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
{ No Statement.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Vaccinia	1	1	...	...	...	...	...	...	...	...	...	...	...	...
Chickenpox .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Measles	45	9	31	5	...	...	...	...	...	...	...	...	...	...
Rubella	1	1	...	...	...	...	...	...	...	...	...	...	...	...
Scarlet Fever..	9	1	2	1	...	3	...	1	1	...	...	...	...	...
Typhus .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Plague.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Relapsing Fever .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Influenza	304	7	3	1	2	7	9	15	20	46	79	71	38	6
Whooping Cough.....	53	25	28	...	...	...	...	...	...	...	...	...	...	...
Mumps .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diphtheria...	90	3	28	51	4	1	2	...	...	...	1	...	...	...
Poliomyelitis	3	...	1	1	...	...	...	...	...	...	1	...	...	...
Cerebro-spinal Fever	23	9	4	1	2	3	1	1	1	...	1	...	...	...
Simple Cont : Fever.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Enteric Fever	1	...	...	...	...	...	1	...	...	...	...	...	...	...
Asiatic Cholera .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Epidemic Diarrhoea .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diarrhea	80	72	8	...	...	...	...	...	...	...	...	...	...	...
Dysentery	1	...	...	...	...	...	...	...	...	...	...	1	...	...
Malarial Fever.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Trench Fever .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Actinomycosis	1	...	...	...	...	...	...	...	...	1	...	...	...	...
Hydrophobia .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Glanders.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Anthrax .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tetanus	2	...	...	...	...	1	...	1	...	...	...	...	...	...
Syphilis	24	6	...	...	...	...	1	...	...	8	5	3	1	...
Gonorrhœa, Strict : Urethra....	13	...	...	...	...	...	...	1	2	2	4	4	...	...
Puerperal.. { Septicæmia	15	...	...	...	...	...	4	8	3	...	...	...	...	...
{ Pyæmia .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
{ Phlegmasia Dol..	...	...	...	...	...	...	...	...	...	...	...	...	...	...
{ Fever.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Infective Endocarditis	13	1	...	...	1	2	1	4	...	2	2	...	...	...
Leprosy .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Psittacosis .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Erysipelas	17	2	...	...	...	...	...	...	...	3	5	5	2	...
Septicæmia (not puerp :).....	9	2	...	2	...	...	...	...	3	1	1	...	...	...
Pyæmia (not puerp :).....	1	1	...	...	...	...	...	...	...	...	...	...	...	...
Phlegmon	10	...	...	...	...	1	1	1	...	2	1	3	1	...
Phagedæna .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Other Septic Diseases.....	2	...	2	...	...	...	...	...	...	...	...	...	...	...
Tubercular Phthisis.....	618	...	...	2	2	52	72	116	122	110	94	40	8	...
Phthisis	46	1	6	...	...	6	5	10	6	4	6	2	...	...
Tubercular Meningitis.....	61	5	21	8	7	8	4	7	...	...	1	...	...	...
Tubercular Peritonitis	10	...	1	2	1	1	3	...	1	1	...	...	...	...
Tabes Mesenterica .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...

TABLE A, 1937—continued.

CAUSES OF DEATH	AGES AT DEATH													
	All Ages	UNDER 5 YEARS		5 to 10	10 to 15	15 to 20	20 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 to 75	75 to 85	85 and upwards
		0 to 1	1 to 5											
3. DISEASES OF HEART.														
Valvular Dis : Endocarditis	310	1		1	1	5	17	28	40	38	68	76	33	2
Pericarditis	10	1		1			1	1		2	3	1		
Hypertrophy of Heart.....	...													
Angina Pectoris	101													
Dilatation of Heart	30								4	22	38	27	9	1
Fatty Degen : of Heart	21							1	2		9	11	5	2
Syncope, Heart Disease.....	1472	7	1	1	1		2	6	25	118	327	551	369	64
4. DIS : OF BLOOD VESSELS.														
Arterio Sclerosis	608							1	4	20	112	246	189	36
Cerebral Hæmorrhage.....	257	5	1	1					10	25	71	86	44	14
<i>Apoplexy, Hemiplegia</i>	20											10	9	1
Aneurism ..	17						1	2	3	2	6	2	1	
Senile Gangrene	16										1	6	9	
Embolism, Thrombosis	196				1		1	1	5	17	56	76	38	1
Phlebitis.....	10								1	3	2	4		
Varicose Veins	1									1				
Blood Vessels (Other Diseases)	29		1					1	2	8	3	8	5	1
5. DIS : OF RESPIRATORY SYS :														
Laryngitis .....	...												
Memb: Laryng: (Not Diphth:)	...													
Croup.....	...													
Larynx (Other Dis:)	...													
Bronchitis	452	19	2	1		1	3	3	12	47	110	120	104	30
Pneumonia { Lobar-Croupous.	341	14	25	4	3	5	7	34	53	54	72	49	19	2
{ Broncho-Lobular.	361	118	67	6		2	4	6	12	37	45	37	22	5
<i>"Pneumonia"</i>	13	4	1						2	2	2		2	
Emphysema, Asthma	33	1		1			1	3	4	6	11	4	1	1
Pleurisy	11									1	5	4	1	
Fibroid Disease of Lung.....	...													
Respiratory Dis: (Other)	64	2	3			3		4	5	9	8	13	15	2
6. DIS: OF DIGESTIVE SYS:														
Tonsillitis, Quinsy	11		3			2	1	1		1	1		2	
Mouth, Pharynx .....	...												
Gastric Ulcer.....	83					1	1	5	10	22	18	19	6	1
Gastric Catarrh.....	...													
Stomach (Other Dis:)	18	3						2	1		3	3	6	
Enteritis.....	16		1			1		3	2	1	4	2	2	
<i>Gastro-Enteritis</i>.....	...												
Appendicitis, Perityph :	58		4	3	5	3	4	6	7	10	7	7	2	
Hernia	51	3					1		3	7	14	15	6	2
Intestinal Obstruct:.....	73	8		2		2	1	5	5	7	14	18	10	1
Other Diseases of Intestines ...	2										1	1		
Peritonitis	20		1	2	1			3	1	4	3	5		
Cirrhosis of Liver.....	19						1		2	3	8	3	2	
Liver	4	1			1					1		1		
Biliary Calculi ..	8									1	2	4	1	
Digestive System (Other Dis:)	36	1	2	3		1		1	2	11	3	6	5	1
7. DIS : OF LYMPHATIC AND DUCTLESS GLANDS.														
Spleen, Disease of.....	3							1	1	1				
Lymphat: Syst: (Other Dis:)	26	1	2						2	5	13	3		
Thyroid Body (Other Dis:)	10								1	3	2	3	1	
Addison's Dis : (Dis: of)	5							1		1	2	1		
8. DISEASES OF URINARY SYSTEM.														
Nephritis Ac: Uræmia	41		1	2	2	5	2	3	2	5	8	6	3	2
Ch : Bright's Dis : Albumin : ...	192				2	2	3	6	15	30	58	54	21	1
Calculus	3										2	1		
Bladder and Prostate Dis : ...	98	1								1	28	38	27	3
Urinary Syst : (Other Dis :) ...	27		1			1	1	2	3	6	6	5	2	

TABLE A, 1937—concluded.

CAUSES OF DEATH	AGES AT DEATH													
	All Ages	UNDER 5 YEARS		5 to 10	10 to 15	15 to 20	20 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 to 75	75 to 85	85 and upwards
		0 to 1	1 to 5											
9. DISEASES OF GENERATIVE SYSTEM.														
Ovarian Tumour	2	...	...	...	...	...	...	...	2	...	...	...	...	...
Other Dis: of Ovary	3	...	...	...	...	...	...	...	...	1	...	2	...	...
Uterine Tumour	1	...	...	...	...	...	...	...	...	1	...	...	...	...
Other Dis: of Uterus and Vagina	1	...	...	...	...	...	...	...	...	1	...	...	...	...
Disord: of Menstruation .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Gener: and Mam: Orgs: (Other)	10	...	...	...	...	1	2	2	3	...	1	...	1	...
10. DISEASES OF PREGNANCY AND CHILDBIRTH.														
Abortion, Miscarriage	1	...	...	...	...	...	...	1	...	...	...	...	...	...
Puerperal Mania .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Puerperal Convulsions	3	...	...	...	...	...	...	2	1	...	...	...	...	...
Placenta Præv: Flooding.....	3	...	...	...	...	...	...	2	1	...	...	...	...	...
Other Ac: of Preg: & Childbirth	25	...	...	...	...	1	2	12	10	...	...	...	...	...
11. DISEASES OF LOCOMOTOR SYSTEM.														
Caries, Necrosis	4	...	...	...	...	...	...	...	1	...	2	1	...	...
Arthritis, Periostitis	4	...	...	1	...	...	1	...	...	...	...	1	1	...
Locomotor Sys: (Other).....	12	...	1	...	3	1	...	1	2	3	...	1	...	...
12. DISEASES OF THE SKIN.														
Carbuncle, Boil	9	...	...	...	1	2	...	...	1	...	...	4	1	...
Ulcer, Bedsore	2	...	...	...	...	...	...	...	...	...	...	1	1	...
Eczema	3	3	...	...	...	...	...	...	...	...	...	...	...	...
Pemphigus.....	3	2	...	...	...	...	...	...	...	...	...	1	...	...
Skin Diseases (Other)	10	1	1	...	1	1	...	1	...	4	...	...	1	...
C.—Other Specified Diseases														
D.—Ill-defined and not Specified Diseases.														
Atrophy, Debility.....	17	17	...	...	...	...	...	...	...	...	...	...	...	...
Old Age	622	...	...	...	...	...	...	...	...	1	6	147	365	103
Dropsy, Ascites, Anasarca	1	...	...	...	...	...	...	...	...	...	...	...	1	...
Tumour	18	...	...	...	...	...	1	1	1	4	6	4	1	...
Abscess	8	1	...	...	...	...	1	1	1	...	4	...	...	...
Hæmorrhage .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Sudden (cause unascertained)...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Other Ill-defined	2	1	...	...	...	...	...	...	...	...	1	...	...	...
E.—Violent Deaths.														
1. ACCIDENT.														
In Mines and Quarries.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
By Vehicles { On Railways ...	6	...	...	1	...	...	...	...	1	3	1	...	...	...
{ In Streets.....	92	...	8	5	1	10	5	9	10	8	8	21	7	...
Ships, Boats, Docks (not Drowning) .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Building Operations .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Machinery	4	...	...	...	...	1	...	1	1	...	...	1	...	...
Weapons and Implements .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Burns and Scalds	32	...	8	4	2	...	...	2	1	2	3	5	3	2
Poison, Poisonous Vapours.....	1	...	...	...	...	...	...	...	...	...	...	1	...	...
Drowning	11	2	...	1	...	2	1	1	...	1	1	1	1	...
Suffocation.....	6	5	...	...	...	...	...	...	...	...	1	...	...	...
Falls	88	2	...	2	...	...	2	8	5	9	8	19	25	8
Weather Agencies.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Otherwise or not Stated	17	1	3	1	2	...	1	3	1	1	2	2	...	...
2. HOMICIDE.														
3. SUICIDE.	68	...	...	...	1	...	2	8	11	16	21	8	1	...
4. EXECUTION.														

TABLE C.—MANCHESTER, 1937.

CAUSES OF DEATHS AT DIFFERENT LIFE PERIODS—FEMALES.

Classes	CAUSES OF DEATH	All Ages Total	AGES AT DEATH—IN YEARS													
			UNDER 5 YEARS		5	10	15	20	25	35	45	55	65	75	85 and upwards	
			0	1	to	to	to	to	to	to	to	to	to			
			to	to	10	15	20	25	35	45	55	65	75	85		
	All Causes	5062	378	144	70	37	81	128	226	296	453	836	1203	980	230	
A	Smallpox .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Measles.....	25	7	16	2	...	...	...	...	...	...	...	...	...	...
	Scarlet Fever	5	...	1	1	...	1	...	1	1	...	...	...	...	...
	Typhus Fever .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Whooping Cough	26	13	13	...	...	...	...	...	...	...	...	...	...	...
	Diphtheria	49	1	13	29	3	1	1	...	...	...	1	...	...	...
	Ill-defined Fever.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Enteric Fever	1	...	...	...	...	...	1	...	...	...	...	...	...	...
	Influenza	159	2	1	1	1	1	6	7	8	19	40	39	29	5	
	Epidemic Diarrhœa .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Diarrhœa, Dysentery, Simple Cholera	39	34	4	...	...	...	...	...	...	...	...	1	...	...
	Venereal Affections.....	11	3	...	...	...	...	1	...	...	4	1	1	1	...
	Erysipelas.....	5	...	...	...	...	...	...	...	...	2	...	2	1	...
	Pyæmia, Septicæmia (Others) ...	1	...	...	...	...	...	...	...	1	...	...	...	...	...
	Puerperal Fever	15	...	...	...	...	...	4	8	3	...	...	...	...	...
	Other Zymotics	32	8	3	1	2	4	1	4	2	1	3	...	2	1	
	Tubercular Periton : Tabes Mes.	6	...	...	2	1	1	2	...	...	...	...	...	...	...
	Tubercular Meningitis	30	1	12	3	1	4	4	5	...	...	...	...	...	...
	Phthisis.....	273	...	4	...	2	38	53	66	51	23	27	8	1	...	
	Tuberculous Diseases (Other) ...	17	...	...	...	1	1	3	...	4	2	3	3	...	...
	Parasitic Diseases	1	...	1	...	...	...	...	...	...	...	...	...	...	...
Alcoholism	4	...	...	...	...	...	...	...	...	...	4	...	...	...
Rheumatic Fever	25	...	...	1	5	...	1	3	2	2	2	6	2	1	
Cancer	621	...	1	...	...	4	2	12	43	104	173	182	87	13	
Premature Birth	90	90	...	...	...	...	...	...	...	...	...	...	...	...
Congenital defects	56	54	1	1	...	...	...	...	...	...	...	...	...	...
Atelectasis	8	8	...	...	...	...	...	...	...	...	...	...	...	...
B and C	Epilepsy	21	...	...	...	...	1	1	3	6	3	2	4	1	...
	Convulsions	11	11	...	...	...	...	...	...	...	...	...	...	...	...
	Nervous System (Other).....	93	1	4	3	3	...	3	7	14	14	17	23	4	...	
	Cerebral Hæmorrhage, Apoplexy and Hemiplegia	166	3	...	1	...	...	...	6	15	38	53	37	13	...
	Heart and Blood Vessel Diseases	1464	3	1	2	1	4	14	27	46	107	276	511	393	79	
	Pleurisy.....	4	...	...	...	...	...	...	...	...	...	3	1	...	...
	Bronchitis	222	9	1	1	...	1	...	...	6	14	46	65	61	18
	Pneumonia { Lobar-Croupous	124	6	11	3	2	2	3	11	16	16	28	20	5	1	
	{ Broncho-Lobular	176	63	33	4	...	1	2	3	6	12	17	17	15	3	
	“Pneumonia”.....	5	...	1	...	...	...	...	...	2	...	...	...	2	...
	Respiratory Diseases (Other) ...	38	1	2	...	...	2	...	3	3	6	5	5	8	3
	Cirrhosis	9	...	...	...	...	...	...	...	...	3	4	1	1	...
	Digestive System (Other).....	184	6	8	5	4	2	4	14	11	23	33	42	28	4	
	Urinary System (Other)	146	...	...	2	3	2	4	7	12	22	38	40	14	2
	Generative Organs and Childbirth	48	...	...	...	...	2	4	19	17	3	1	2	...	...
	Other specified Diseases	314	40	5	4	6	7	9	11	26	38	55	66	42	5	
	D	Marasmus and Atrophy.....	7	7
		Old Age	385	1	3	84	223	74	...
		Other Ill-defined Causes	14	2	1	2	3	3	2	1	...
	E	Violence	108	7	8	4	1	2	1	6	6	10	9	24	22	8
		Homicide.....	2	2
Suicide		22	...	...	...	1	...	2	6	2	6	4	1	..	...

TABLE D.
MANCHESTER, 1937.—CAUSES OF DEATH IN INFANCY AND
CHILDHOOD.

CAUSES OF DEATH	UNDER ONE YEAR			Total under One Year	ONE AND UNDER FIVE YEARS				Total under Five Years
	Under 3 months	3-6 months	6-12 months		1-	2-	3-	4-	
All Causes	520	149	150	819	153	69	42	39	1,122
Chicken Pox.....	...	...	...	...	...	...	...	...	...
Measles	1	...	8	9	16	6	4	5	40
Scarlatina .....	...	1	...	1	...	...	...	2	3
Whooping Cough	5	5	15	25	15	8	5	...	53
Diphtheria.....	1	1	1	3	3	7	8	10	31
Erysipelas	1	1	...	2	...	...	...	...	2
Diarrhoeal Diseases	28	27	17	72	8	...	...	...	80
Gastritis.....	...	...	...	...	...	...	...	...	...
Syphilis	2	4	...	6	...	...	...	...	6
Tabes Mesenterica and Tuberc. Peritonitis	...	...	...	...	...	1	...	...	1
Tubercular Meningitis .....	...	3	2	5	14	3	2	2	26
Tuberculosis (Other) .....	...	1	...	1	4	1	1	1	8
Rickets .....	...	1	3	4	1	...	...	...	5
Premature Birth	207	6	...	213	...	...	...	...	213
Injury at Birth	44	...	...	44	...	...	...	...	44
Atelectasis.....	18	...	..	18	...	...	..	...	18
Congenital Malformations	79	9	5	93	2	2	...	...	97
Convulsions	12	13	7	32	3	...	1	...	36
Meningitis.....	2	1	...	3	2	...	1	1	7
Nervous Diseases (Other)...	...	1	1	2	...	1	1	2	6
Bronchitis	9	5	5	19	1	1	...	...	21
Pneumonia	42	44	50	136	61	22	6	4	229
Other Respiratory Diseases	1	...	2	3	2	...	...	1	6
Atrophy, Marasmus	11	6	...	17	...	...	...	...	17
Found Dead in Bed (over- laid)	2	1	...	3	...	...	...	...	3
Suffocation	2	...	...	2	...	...	...	...	2
Violence (Other forms).....	4	1	...	5	4	4	5	6	24
Ill-defined Causes.....	1	...	1	2	...	...	...	...	2
Unclassified	48	18	32	99	17	13	8	5	142

Year	Estimated Population (Mean)	Marriage Rate per 1,000 persons living	Annual Rates per 1,000 persons living											Percentage to Total Deaths		Infantile Mortality	Year	
			Deaths (all causes)	Smallpox	Measles	Scarlet Fever	Diphtheria	Whooping Cough	Typhus Fever	Enteric Fever	Simple Continued Fever	Diarrhoeal Diseases	Violence	Inquest Cases	Deaths in Public Institutions			
1871-1875	477,344	24.6	38.9	28.3	0.26	0.64	1.08	0.08	0.78	0.14	0.43	0.21	1.95	0.94	7.2	13.4	198	.. 1871-1875
1876-1880	509,802	18.6	38.7	26.2	0.24	0.53	1.07	0.13	0.84	0.08	0.29	0.11	1.26	0.89	7.5	14.3	172	.. 1876-1880
1881-1885	542,746	17.9	35.1	23.6	0.04	0.71	0.48	0.10	0.68	0.05	0.20	0.03	0.99	0.72	7.0	15.9	175	.. 1881-1885
1886-1890	575,630	16.6	33.4	24.6	0.02	0.83	0.50	0.32	0.54	0.02	0.30	0.01	1.08	0.78	6.9	17.7	183	.. 1886-1890
1891-1895	517,801	16.9	33.2	23.6	0.03	0.62	0.26	0.27	0.64	0.00	0.24	0.01	1.19	0.77	7.1	19.2	186	.. 1891-1895
1896-1900	539,599	18.2	32.5	22.7	..	0.89	0.20	0.13	0.53	0.00	0.18	0.01	1.69	0.73	7.1	20.2	192	.. 1896-1900
1901-1905	554,355	17.4	30.9	20.1	0.01	0.55	0.19	0.22	0.41	0.00	0.13	0.00	1.15	0.72	7.1	24.4	173	.. 1901-1905
1906-1910	660,049	17.0	28.1	17.7	..	0.54	0.16	0.17	0.37	0.00	0.10	0.00	0.76	0.68	7.4	27.3	147	.. 1906-1910
1911-1915	731,677	17.6	24.8	16.4	..	0.50	0.12	0.14	0.25	..	0.05	..	0.84	0.67	7.9	30.8	133	.. 1911-1915
1916-1920	770,330	16.7	19.2	14.1	..	0.24	0.04	0.08	0.21	..	0.02	0.00	0.30	0.49	6.4	32.3	105	.. 1916-1920
1921-1925	751,288	16.8	20.6	13.9	..	0.25	0.06	0.10	0.20	..	0.01	..	0.33	0.44	5.7	37.8	95	.. 1921-1925
1926-1930	759,570	17.3	17.4	13.8	..	0.18	0.02	0.11	0.14	..	0.01	..	0.24	0.46	4.8	42.9	88	.. 1926-1930
1931-1935	771,182	16.8	15.0	13.1	..	0.11	0.02	0.10	0.08	..	0.00	..	0.15	0.46	5.0	48.5	77	.. 1931-1935
1933	771,165	16.7	14.4	13.4	..	0.06	0.02	0.11	0.06	..	0.00	..	0.13	0.46	5.0	47.8	75	.. 1933
1934	773,593	17.9	14.8	12.2	..	0.13	0.02	0.11	0.05	..	0.00	..	0.17	0.42	4.9	49.1	69	.. 1934
1935	776,028	17.2	14.5	12.9	..	0.13	0.02	0.07	0.06	..	0.00	..	0.11	0.42	4.6	51.2	71	.. 1935
*1936	759,058	17.7	14.7	13.5	..	0.16	0.01	0.12	0.06	..	0.00	..	0.09	0.46	4.7	52.2	77	.. 1936
1937	751,371	19.1	14.3	13.5	..	0.06	0.01	0.12	0.07	..	0.00	..	0.11	0.44	4.3	53.9	76	.. 1937

The populations and rates prior to 1891 are those for the Unions of Manchester, Chorlton, and Prestwich, which have been taken as approximately representing "Manchester." The City was extended to include Moss Side and Withington in November, 1904, Gorton and Levenshulme in November, 1909, and Wythenshawe, April, 1931.

*The population for calculating the death rates for 1936 = 771,018, as the facts for this year are for 53 weeks.

TABLE F.
MANCHESTER—ANNUAL RATES OF MORTALITY FROM CERTAIN CAUSES OF DEATH.

YEAR	ANNUAL RATES PER 1,000 PERSONS LIVING										RATES PER 1,000 BIRTHS	
	Cancer	Tuberc. Peritonitis Tabes Mes.	Phthisis	Other Tuberc. Diseases	Diseases of Nervous System	Diseases of Heart and Blood Vessels	Diseases of Respiratory System	Diseases of Digestive System	Diseases of Urinary System	Diseases of Generative System	Puerperal Fever	Childbirth
1881-1885 ..	0.50	0.35	2.42	0.57	3.28	1.37	5.41	1.23	0.48	0.08	3.03	1.99
1886-1890 ..	0.64	0.36	2.24	0.59	3.09	1.73	5.76	1.23	0.61	0.08	3.22	2.13
1891-1895 ..	0.62	0.22	2.09	0.75	1.74	2.53	5.56	1.07	0.52	0.07	2.75	3.42
1896-1900 ..	0.73	0.19	2.04	0.63	1.32	2.54	5.03	1.04	0.49	0.09	1.55	1.51
1901-1905 ..	0.80	0.16	1.94	0.55	1.17	2.56	4.29	0.95	0.49	0.08	1.21	1.76
1906-1910 ..	0.88	0.14	1.65	0.45	0.95	2.56	3.75	0.84	0.54	0.07	1.28	1.49
1911-1915 ..	1.01	0.12	1.59	0.38	0.79	2.34	3.45	0.68	0.56	0.09	1.24	2.14
1916-1920 ..	1.08	0.09	1.39	0.28	0.54	2.27	2.98	0.51	0.47	0.06	1.58	1.82
1921-1925 ..	1.34	0.06	1.26	0.24	0.51	2.58	3.03	0.47	0.46	0.07	1.54	2.04
1926-1930 ..	1.45	0.03	1.16	0.19	0.48	3.05	2.66	0.45	0.50	0.07	1.74	2.80
1931-1935 ..	1.61	0.02	1.00	0.13	0.41	3.68	1.95	0.46	0.48	0.05	*1.47	*2.40
1933.. ..	1.52	0.02	1.00	0.13	0.41	3.90	1.97	0.47	0.50	0.07	1.45	3.42
1934.. ..	1.60	0.02	0.97	0.14	0.37	3.77	1.47	0.45	0.47	0.06	1.25	3.00
1935.. ..	1.68	0.02	0.92	0.10	0.41	3.62	1.73	0.48	0.44	0.04	2.03	1.61
1936.. ..	1.62	0.02	0.87	0.12	0.39	4.10	1.83	0.50	0.49	0.07	1.69	3.20
1937.. ..	1.66	0.01	0.88	0.15	0.36	4.12	1.69	0.53	0.48	0.07	1.34	2.85

See footnotes to Table E
* From the Year 1931 the Maternal Mortality rates are calculated on per 1,000 births (Live and Stillbirths).

TABLE G, 1937.—POPULATION, AREA, DENSITY. TOTAL BIRTHS AND DEATHS, WITH BIRTH AND DEATH RATES.

[INSTITUTION POPULATIONS, BIRTHS AND DEATHS, DISTRIBUTED.]

WARDS	Estimated Population	Area in Acres	Persons to an Acre	BIRTHS		DEATHS		Natural Rate or Increase
				Total	Rate per 1,000	Total	Rate per 1,000	
City	751,371	27,257	28	10,754	14'31	10,157	13'52	+ 0'79
All Saints	20,908	300	70	339	16'21	340	16'26	— 0'05
Ardwick	23,247	426	55	409	17'59	375	16'13	+ 1'46
Beswick	26,083	254	103	428	16'41	288	11'05	+ 5'36
Blackley	21,916	1,158	19	283	12'92	309	14'10	— 1'18
Bradford	27,855	790	35	454	16'30	357	12'82	+ 3'48
Cheetham	23,095	555	42	275	11'91	288	12'47	— 0'56
Chorlton-cum-Hardy	45,741	1,666	27	365	8'00	516	11'28	— 3'28
Collegiate Church	14,844	446	33	225	15'16	209	14'08	+ 1'08
Collyhurst	16,579	232	71	232	13'99	203	12'24	+ 1'75
Crumpsall	16,261	2,203	7	261	16'05	224	13'78	+ 2'27
Didsbury	26,897	2,354	11	288	10'71	308	11'45	— 0'74
Exchange	291	61	5	4	13'75	5	17'18	— 3'43
Gorton North	20,482	604	34	278	13'57	278	13'57	0'00
Gorton South	30,288	628	48	336	11'10	370	12'22	— 1'12
Harpurhey	19,876	344	58	344	17'31	290	14'59	+ 2'72
Levenshulme	19,171	606	32	226	11'79	268	13'98	— 2'19
Longsight	22,813	593	38	290	12'71	286	12'54	+ 0'17
Medlock Street	22,034	212	104	415	18'84	328	14'88	+ 3'96
Miles Platting	21,259	313	68	333	15'66	277	13'03	+ 2'63
Moston	25,247	1,231	21	347	13'75	295	11'68	+ 2'07
Moss Side East	18,497	241	77	314	16'98	292	15'79	+ 1'19
Moss Side West	18,920	267	71	272	14'38	346	18'29	— 3'91
New Cross	22,498	303	74	397	17'65	436	19'38	— 1'73
Newton Heath	21,405	1,007	21	228	10'65	303	14'16	— 3'51
Openshaw	21,391	482	44	302	14'12	282	13'19	+ 0'93
Oxford	624	167	4	16	25'64	18	28'85	— 3'21
Rusholme	21,764	806	27	230	10'57	270	12'41	— 1'84
St. Ann's	219	55	4	...	...	5	22'83	— 22'83
St. Clement's	5,167	181	29	25	4'84	45	8'71	— 3'87
St. George's	24,156	266	91	470	19'46	401	16'60	+ 2'86
St John's	4,269	199	21	46	10'78	83	19'44	— 8'66
St. Luke's	25,403	316	80	391	15'39	480	18'90	— 3'51
St. Mark's	20,967	340	62	344	16'41	325	15'50	+ 0'91
St. Michael's ..	17,776	243	73	333	18'73	264	14'85	+ 3'88
Withington	48,918	1,841	27	496	10'14	481	9'83	+ 0'31
Wythenshawe	34,510	5,567	6	758	21'97	312	9'04	+ 12'93

TABLE H, 1937.

BIRTHS REGISTERED IN THE CITY OF MANCHESTER, IN WARDS, AND DISTINGUISHING LEGITIMATE AND ILLEGITIMATE BIRTHS; ALSO THE PROPORTION OF MORTALITY AMONG INFANTS OF BOTH CLASSES UNDER ONE YEAR OF AGE.

WARDS	BIRTHS		Percentage of Illegitimate Births to Total Births	DEATHS UNDER 1 YEAR		PROPORTION OF DEATHS UNDER 1 YEAR PER 1,000 BIRTHS		
	Total	Illegitimate		Total	Of Illegitimate Children	Total	Legitimate	Illegitimate
City	10,754	488	4.5	819	50	76	75	102
All Saints	339	41	12.1	37	4	109	111	98
Ardwick	409	22	5.4	34	3	83	80	136
Beswick	428	9	2.1	29	3	68	62	333
Blackley	283	5	1.8	23	1	81	79	200
Bradford	454	6	1.3	36	...	79	80	...
Cheetham	275	12	4.4	17	...	62	65	...
Chorlton-cum-Hardy.....	365	16	4.4	20	3	55	49	188
Collegiate Church.....	225	16	7.1	31	2	138	139	125
Collyhurst.....	232	9	3.9	19	1	82	81	111
Crumpsall.....	261	8	3.1	14	...	54	55	...
Didsbury	288	7	2.4	12	...	42	43	...
Exchange	4	2	50.0	...	...	...	...	...
Gorton North.....	278	5	1.8	25	2	90	84	400
Gorton South.....	336	9	2.7	32	3	95	89	333
Harpurhey.....	344	10	2.9	30	2	87	84	200
Levenshulme	226	13	5.8	12	1	53	52	77
Longsight	290	17	5.9	11	...	38	40	...
Medlock Street.....	415	24	5.8	29	2	70	69	83
Miles Platting	333	9	2.7	35	1	105	105	111
Moston	347	11	3.2	21	1	61	60	91
Moss Side East.....	314	28	8.9	26	1	83	87	36
Moss Side West	272	22	8.1	24	3	88	84	137
New Cross	397	16	4.0	30	2	76	73	125
Newton Heath.....	228	9	3.9	14	...	61	64	...
Openshaw.....	302	8	2.6	29	...	96	99	...
Oxford	16	...	...	2	1	125	62	...
Rusholme	230	14	6.1	11	1	48	46	71
St. Ann's.....	...	...	...	2	...	...	...	...
St. Clement's.....	25	2	8.0	...	...	...	...	...
St. George's.....	470	30	6.4	38	1	81	84	33
St. John's.....	46	1	2.2	5	...	109	111	...
St. Luke's.....	391	45	11.5	40	7	102	95	156
St. Mark's.....	344	21	6.1	32	1	93	96	48
St. Michael's.....	333	18	5.4	24	2	72	70	111
Withington	496	12	2.4	19	1	38	37	83
Wythenshawe	758	11	1.5	56	1	74	74	91

TABLE I, 1937.

MANCHESTER.—CERTIFICATION OF THE CAUSES OF DEATH IN THE CITY
AND IN THE VARIOUS WARDS.

WARDS	Total Deaths	Certified by		Not Certified	Proportion per cent. of Deaths		
		Registered Medical Practitioners	Inquest		Certified by		Not Certified
					Regist'd Medical Prac- titioners	Inquest	
City	10,157	9,576	440	141	94·3	4·3	1·4
All Saints	340	319	15	6	93·8	4·4	1·8
Ardwick	375	356	13	6	94·9	3·5	1·6
Beswick	288	273	14	1	94·8	4·9	0·3
Blackley	309	299	8	2	96·8	2·6	0·6
Bradford	357	345	11	1	96·6	3·1	0·3
Cheetham	288	273	13	2	94·8	4·5	0·7
Chorlton-cum-Hardy	516	489	20	7	94·9	3·9	1·4
Collegiate Church	209	187	16	6	89·4	7·7	2·9
Collyhurst	203	190	12	1	93·6	5·9	0·5
Crumpsall ..	224	211	9	4	94·2	4·0	1·8
Didsbury.....	308	289	19	...	93·8	6·2	...
Exchange	5	5	...	...	100·0	...	...
Gorton North.....	278	268	9	1	96·4	3·2	0·4
Gorton South	370	345	22	3	93·3	5·9	0·8
Harpurhey	290	269	14	7	92·8	4·8	2·4
Levenshulme	268	248	15	5	92·5	5·6	1·9
Longsight	286	276	7	3	96·6	2·4	1·0
Medlock Street	328	307	15	6	93·6	4·6	1·8
Miles Platting.....	277	267	7	3	96·4	2·5	1·1
Moston	295	279	14	2	94·6	4·7	0·7
Moss Side East	292	273	10	9	93·5	3·4	3·1
Moss Side West.....	346	335	7	4	96·8	2·0	1·2
New Cross	436	417	12	7	95·6	2·8	1·6
Newton Heath	303	284	17	2	93·7	5·6	0·7
Openshaw	282	259	15	8	91·9	5·3	2·8
Oxford	18	17	1	...	94·4	5·6	...
Rusholme	270	248	15	7	91·8	5·6	2·6
St. Ann's.....	5	5	...	...	100·0	...	...
St. Clement's	45	45	...	...	100·0	...	...
St. George's	401	370	29	2	92·3	7·2	0·5
St. John's	83	75	5	3	90·4	6·0	3·6
St. Luke's	480	450	20	10	93·7	4·2	2·1
St. Mark's	325	301	18	6	92·7	5·5	1·8
St. Michael's	264	249	10	5	94·3	3·8	1·9
Withington.....	481	458	16	7	95·2	3·3	1·5
Wythenshawe	312	295	12	5	94·6	3·8	1·6

NOTIFIABLE INFECTIOUS DISEASES OTHER THAN
WHOOPING COUGH AND TUBERCULOSIS.

The diseases included in the Public Health Act, 1936, or regulations under the Public Health Acts, are as follows :—Smallpox, Scarlet Fever, Diphtheria, Membranous Croup, Typhus Fever, Enteric or Typhoid Fever, Relapsing Fever, Puerperal Fever, Puerperal Pyrexia, Erysipelas, Ophthalmia Neonatorum, Cerebro-Spinal Fever, Poliomyelitis, Polio-Encephalitis and Encephalitis-Lethargica, Malaria, Dysentery, Acute Primary Pneumonia, Acute Influenzal Pneumonia, Measles, Rubella, and Pemphigus Neonatorum. The following cases were notified in 1937 and the numbers are compared with the average of the previous ten years :—

	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	Mean	1937
Smallpox	36	68	8	2	..	..	..	..	..	..	11	...
Scarlet Fever	1,823	2,100	2,318	3,701	2,913	2,283	1,773	2,080	2,795	2,402	2,419	2,555
Diphtheria	1,208	1,033	761	838	573	885	732	866	903	1,202	900	1,392
Typhus Fever .. .. .	..	..	..	..	..	..	..	..	..	..	..	...
Enteric Fever	18	32	41	33	24	39	14	14	20	15	25	...
Relapsing Fever .. .. .	..	..	..	..	..	..	..	..	..	..	..	...
Puerperal Fever	107	133	144	156	139	96	128	107	132	106	125	...
Puerperal Pyrexia	102	66	80	88	80	76	77	119	122	136	95	121
Erysipelas	358	428	441	501	399	334	377	363	408	370	398	340
Ophthalmia Neonatorum	192	192	137	144	119	108	107	122	140	122	138	121
Cerebro-Spinal Fever	9	9	17	22	38	27	45	40	49	62	32	...
Poliomyelitis.. .. .	12	8	4	3	4	5	8	14	7	29	9	...
Polio-Encephalitis .. .. .	..	2	2	..	..	..	3	2	1	2	1	...
Encephalitis-Lethargica	65	50	37	23	24	9	3	6	4	..	25	...
Malaria	3	15	14	1	1	1	..	..	2	2	4	...
Dysentery	2	13	4	17	6	2	..	3	7	1	6	...
Primary Pneumonia	2,260	2,176	2,265	2,059	2,005	2,047	1,734	1,496	2,105	1,973	2,012	1,960
Influenzal Pneumonia	690	363	875	290	480	321	793	178	375	240	461	440
Measles	13,987	7,141	9,512	10,738	7,771	12,238	6,350	11,383	9,907	8,807	9,783	6,550
Rubella	407	1,498	499	237	2,553	1,687	334	342	1,180	866	960	850
Pemphigus Neonatorum	116	106	87	112	64	46	41	33	25	36	67	...
	21,395	15,433	17,246	18,965	17,193	20,204	12,519	17,168	18,173	16,371	17,461	14,550

In 1900 Erysipelas was made notifiable, in 1910 Ophthalmia Neonatorum, in 1912 Cerebro-Spinal Fever and Poliomyelitis, Measles and Rubella were made notifiable in 1916, and Polio-Encephalitis, Encephalitis-Lethargica, Malaria, Dysentery, Primary Pneumonia, Influenzal Pneumonia in 1919, in 1925 (September) Pemphigus Neonatorum.

Puerperal Pyrexia was made notifiable on October 1st, 1926.

The Public Health Act 1936 provides that Puerperal Pyrexia includes the obligation to notify conditions at present notifiable as Puerperal Fever as from October 1st, 1937.

The deaths from the more common diseases are shown in the following figures :—

Years	Measles	Scarlet Fever	Diphtheria	Enteric Fever	Influenza	Whooping Cough	Diarrhoea	Phthisis
1927-36 average	104	14	76	4	296	81	132	809
1937	45	9	90	1	304	53	82	664

Consultations.—Fifty-nine consultation visits were made during the year by Medical Officers of the Department at the request of medical practitioners in the City in connection with the diagnosis of cases of infectious disease in which the nature of the illness was in doubt.

SMALLPOX.

No cases of smallpox occurred in the City in 1937.

SCARLET FEVER.

There were 2,578 known cases of scarlet fever in 1937.

The case fatality rate was 0.31 per cent. and the type of disease continued to be mild compared with that which was prevalent in former years. The mortality rate per 1,000 of the population, which had remained constant at 0.02 since 1932, fell to 0.01.

Seventy-four per cent. of the patients were removed to hospital, and a review of these cases is contained in a statement of the Medical Superintendent of Monsall Hospital on page 202 *et seq.* of this report.

The following figures show the course of the disease in Quarters :—

TABLE I.—SCARLET FEVER.—ATTACKS IN QUARTERS ACCORDING TO DATE OF RASH.

Year	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Total
1932 ..	560	579	506	638	2283
1933 ..	417	454	304	598	1773
1934 ..	395	352	502	831	2080
1935 ..	743	590	607	855	2795
1936 ..	382	649	481	890	2402
5 years Mean	499	525	480	762	2266
1937 ..	520	560	607	891	2578

TABLE 2.—1937.—SCARLET FEVER ATTACKS IN WARDS, WITH ATTACK RATE, CASE FATALITY PER CENT., AND REMOVALS TO HOSPITAL PER CENT.

WARDS	ATTACKS	ATTACK RATE PER 1,000 LIVING	† CASE FATALITY PER CENT.	REMOVALS TO HOSPITAL PER CENT.
City	2,578	3·43	0·31	73·55
All Saints	58	2·77	—	82·76
Ardwick	86	3·70	—	81·40
Beswick	80	3·07	—	75·00
Blackley	107	4·88	—	64·49
Bradford	147	5·28	—	84·35
Cheetham	69	2·99	1·45	69·57
Chorlton-cum-Hardy ..	76	1·66	—	52·63
Collegiate Church ..	33	2·22	—	75·76
Collyhurst	76	4·58	—	92·11
Crumpsall	59	3·63	1·69	64·41
Didsbury	53	1·97	—	71·70
Exchange	—	—	—	—
Gorton North	58	2·83	—	62·07
Gorton South	127	4·19	—	80·31
Harpurhey	87	4·38	—	75·86
Levenshulme	67	3·49	—	64·18
Longsight	81	3·55	1·23	77·78
Medlock Street	63	2·86	—	87·30
Miles Platting	63	2·96	3·17	84·13
Moston	136	5·39	0·74	65·44
Moss Side East	41	2·22	—	73·17
Moss Side West	33	1·74	—	78·79
New Cross	69	3·07	—	89·86
Newton Heath	112	5·23	—	78·57
Openshaw	115	5·38	—	73·04
Oxford	6	9·62	—	100·00
Rusholme	46	2·11	—	73·91
St. Ann's	—	—	—	—
St. Clement's	2	0·39	—	50·00
St. George's	60	2·48	—	81·67
St. John's	12	2·81	—	91·67
St. Luke's	69	2·72	—	75·36
St. Mark's	65	3·10	—	70·77
St. Michael's	29	1·63	—	86·21
Withington	169	3·45	—	62·72
Wythenshawe	224	6·49	0·89	62·05

† Corrected; the fatal cases are those actually occurring amongst the cases notified.

TABLE 3.—SCARLET FEVER.—NUMBER OF ATTACKS AND OF DEATHS ;
ALSO THE CASE FATALITY PER CENT. AT DIFFERENT AGES FOR THE
FORTY-SIX YEARS, 1891—1936 AND FOR 1937.

Ages	1891-1936			1937		
	Attacks	Deaths	Case Fatality per cent.	Attacks	Deaths	Case Fatality per cent.
Under 1 year ..	869	130	14·96	16	1	6·25
1 to 2 years ..	2,721	317	11·65	72	—	—
2 to 3 „ ..	6,317	510	8·07	134	—	—
3 to 4 „ ..	8,886	554	6·23	203	—	—
4 to 5 „ ..	10,462	477	4·56	247	3	1·21
5 to 6 „ ..	11,907	306	2·57	324	1	0·31
6 to 7 „ ..	10,822	211	1·95	279	—	—
7 to 8 „ ..	9,615	143	1·49	234	—	—
8 to 9 „ ..	8,018	98	1·22	185	—	—
9 to 10 „ ..	6,716	84	1·25	148	—	—
10 to 15 „ ..	19,847	182	0·92	437	—	—
15 to 20 „ ..	6,111	72	1·18	131	3	2·29
20 to 25 „ ..	3,006	43	1·43	52	—	—
25 to 35 „ ..	2,939	54	1·84	73	—	—
35 to 45 „ ..	959	21	2·19	26	—	—
45 and over	274	8	2·92	17	—	—
All ages	109,469	3,210	2·93	2,578	8	0·31

TABLE 4.—SCARLET FEVER MORTALITY, 1937.—RATE PER 1,000 LIVING COMPARED WITH MEAN OF FIVE YEARS.

	1932	1933	1934	1935	1936	Mean	1937
England and Wales	0·01	0·02	0·02	0·01	0·01	0·01	0·01
125 Great Towns ..	0·01	0·02	0·02	0·01	0·01	0·01	0·01
London	0·02	0·02	0·02	0·01	0·01	0·02	0·01
Manchester City ..	0·02	0·02	0·02	0·02	0·01	0·02	0·02
148 Smaller Towns ..	0·01	0·02	0·02	0·01	0·01	0·01	0·01

SCARLET FEVER, 1937.—ATTACKS IN WEEKS, ACCORDING TO DATE OF RASH.

FIRST QUARTER		SECOND QUARTER		THIRD QUARTER		FOURTH QUARTER	
Week of Year	1937	Week of Year	1937	Week of Year	1937	Week of Year	1937
1	40	14	43	27	50	40	82
2	56	15	34	28	47	41	84
3	39	16	39	29	47	42	62
4	31	17	45	30	32	43	62
5	42	18	56	31	30	44	70
6	45	19	43	32	36	45	71
7	46	20	29	33	32	46	61
8	28	21	33	34	35	47	68
9	37	22	47	35	57	48	53
10	46	23	37	36	44	49	58
11	42	24	46	37	57	50	71
12	35	25	51	38	66	51	86
13	52	26	60	39	67	52	48
Total ..	539	Total ..	563	Total ..	600	Total ..	876

City total, 1937—2,578.

SCARLET FEVER “RETURN” CASES, 1937.

Out of 2,040 discharges from Monsall Hospital, 98 gave rise to at least 89 “return ” cases, a “return ” case rate per cent. of 4·4. In addition, 9 others contracted the disease indirectly from a returned patient.

Table showing the interval between return home of hospital patients and onset of illness in “return ” cases.

Days	0-6	7-13	14-20	21-27
No. of Cases	21	39	18	9

DIPHTHERIA.

The following figures show the number of cases notified and accepted as diphtheria each year for the last ten years :—

1928	1929	1930	1931	1932	1933	1934	1935	1936	1937
1,033	761	838	573	885	732	866	903	1,202	1,397

MORTALITY.

The case fatality rate in 1937 was 6·08 per cent. compared with an average of 9·03 in the previous five years. The death rate per 1,000 of the population in Manchester was 0·11 compared with 0·05 in the country as a whole.

There has been a striking reduction in the case fatality rate in recent years. Reference to the following table shows that although the rate continues to be highest in children under 5 years, it is in this group that the greatest percentage reduction has been attained.

TABLE I.—DIPHTHERIA.—MANCHESTER CASE FATALITY RATES PER CENT. IN AGE GROUPS.

	0-5 years	5-10 years	10-15 years	15 years and over
1901-10	33·5	17·8	6·0	4·5
1928-37	13·3	8·4	3·8	2·7
Percentage Reduction ..	60·3	52·8	36·7	40·0

The mortality from diphtheria, apart from artificial active immunisation, can be combated only by prompt and intensive treatment with antitoxin. The difficulty in this regard becomes evident when it is known that in the fatal cases which occurred in 1937 only 4 per cent. received treatment by antitoxin within two days of the onset of the illness. Such delay is disastrous. It is due in part to the hesitancy of the parent in seeking medical advice and in part to the difficulties of early diagnosis which confront the medical attendant.

“ CARRIERS ” AND THE VIRULENCE TEST.

A diphtheria “ carrier ” is a person who, although apparently in good health, yet harbours in the throat or nose organisms indistinguishable from those of diphtheria. Not all diphtheria-like organisms are capable of provoking disease and a virulence test is made to determine which are capable of so doing and which are not.

The value of the test is that, in cases where the result is negative, isolation of the individual is unnecessary.

Of the total number of formal notifications received it was found on investigation that 215 related to persons who were merely “ carriers ” of diphtheria-like organisms. In addition, a further 92 “ carriers ” were discovered who were not notified as suffering from diphtheria.

In many instances it is not possible to isolate the diphtheria bacilli in pure culture and in such cases a virulence test cannot be carried out.

The following table relates to 329 “ carriers ” in which a virulence test was made and is of interest in showing the types of “ carriers ” and the number who were capable of spreading infection.

In the figures here presented clinical cases of diphtheria are excluded, but cases of children with non-membranous rhinitis unaccompanied by constitutional symptoms are included.

DIPHTHERIA “ CARRIERS ” AND VIRULENCE TESTS, 1937.

Type	No. of “ Carriers ”	No. Virulent	No. Non-virulent	Per cent. Virulent
Nose	179	142	37	79·3
Throat	114	98	16	86·0
Nose and Throat	36	30	6	83·3
Total	329	270	59	82·1

Swabs.

A total of 3,670 swabs were submitted to the Public Health Laboratory upon request by medical practitioners during the year and, of these, 241 or 6·6 per cent. proved positive. So far as was practicable swabs were taken from the throats and noses of all members under 14 years of age of each family where there had occurred a case of diphtheria.

SUPPLY OF ANTITOXIN.

Diphtheria antitoxin, in phials containing 8,000 units, is supplied free of charge to all medical practitioners for the treatment of persons residing temporarily or permanently in the City, and it may be obtained from the Public Health Office during office hours or at any time from the following fire stations :—Ash Street, Harpurhey ; New Street, Miles Platting ; Pollard Street, Ancoats ; Upton Street, Chorlton-upon-Medlock. It may also be obtained at any time from all of the district police stations. The total quantity supplied in this manner in 1937 was 1052 phials (8,416,000 units), at a cost of £337 10s. 4d.

TABLE II.

DIPHTHERIA, 1937—ATTACKS IN WEEKS, ACCORDING TO DATE OF ONSET.

FIRST QUARTER		SECOND QUARTER		THIRD QUARTER		FOURTH QUARTER	
Week of Year	1937	Week of Year	1937	Week of Year	1937	Week of Year	1937
1	43	14	25	27	27	40	30
2	30	15	23	28	30	41	31
3	37	16	22	29	20	42	26
4	35	17	15	30	22	43	49
5	29	18	20	31	19	44	44
6	26	19	20	32	18	45	31
7	17	20	23	33	18	46	27
8	18	21	19	34	28	47	29
9	21	22	25	35	42	48	34
10	22	23	16	36	42	49	28
11	27	24	19	37	34	50	29
12	19	25	22	38	38	51	25
13	20	26	34	39	35	52	14
Total ..	344	Total ..	283	Total ..	373	Total ..	397

CITY TOTAL, 1937—1,397.

The following table shows that the number of attacks is highest in children up to 10 years.

TABLE III.

DIPHTHERIA.—NUMBER OF ATTACKS, OF DEATHS, AND CASE FATALITY AT DIFFERENT AGES FOR THE FORTY-SIX YEARS, 1891-1936, AND FOR 1937.

Ages	1891-1936			1937		
	Attacks	Deaths	*Case Fatality %	Attacks	Deaths	*Case Fatality %
Under 1 year	577	301	52·17	14	2	14·29
1 to 2 years.. .. .	1,452	626	43·11	25	2	8·00
2 to 3 „	2,128	592	27·82	61	6	9·84
3 to 4 „	2,687	567	21·10	92	10	10·87
4 to 5 „	3,008	546	18·15	124	9	7·26
5 to 6 „	3,193	462	14·47	139	16	11·51
6 to 7 „	2,726	305	11·19	146	13	8·90
7 to 8 „	2,111	221	10·47	131	8	6·11
8 to 9 „	1,733	171	9·87	108	7	6·48
9 to 10 „	1,290	111	8·60	76	4	5·26
10 to 15 „	3,929	181	4·61	279	4	1·43
15 to 20 „	1,461	47	3·22	95	1	1·05
20 to 25 „	928	24	2·59	52	2	3·85
25 to 35 „	1,081	26	2·41	34	—	—
35 to 45 „	462	11	2·38	10	—	—
45 and over	239	24	10·04	11	1	9·09
All ages	29,005	4,215	14·53	1,397	85	6·08

* The percentages in this column are the actual proportions of fatal cases to the attacks at those ages..

The case mortality rate at all ages since 1918 has been as follows :

1918	1919	1920	1921	1922	1923	1924	1925	1926	1927
—	—	—	—	—	—	—	—	—	—
10·8	9·1	7·3	8·7	9·8	9·5	9·3	8·8	8·6	8·3

1928	1929	1930	1931	1932	1933	1934	1935	1936	1937
—	—	—	—	—	—	—	—	—	—
8·1	7·8	6·4	10·1	9·3	11·7	9·58	6·64	7·90	6·08

TABLE IV.

DIPHTHERIA, 1937.—ATTACKS IN WARDS, WITH ATTACK RATE, CASE FATALITY PER CENT., AND REMOVALS TO HOSPITAL PER CENT.

Wards	Attacks	Deaths	Attack Rate per 1000 Living	† Case Fatality per cent.	Removals to Hospital per cent.
City	1,397	85	1.86	6.08	93.92
All Saints	64	8	3.06	12.50	96.88
Ardwick	68	6	2.93	8.82	97.06
Beswick	47	4	1.80	8.51	97.87
Blackley	54	2	2.46	3.70	98.15
Bradford	48	2	1.72	4.17	100.00
Cheetham	36	1	1.56	2.78	97.22
Chorlton-cum-Hardy ..	29	2	0.63	6.90	58.62
Collegiate Church ..	17	—	1.15	—	94.12
Collyhurst	15	2	0.90	13.33	100.00
Crumpsall	11	2	0.68	18.18	90.91
Didsbury	17	2	0.63	11.76	94.12
Exchange	—	—	—	—	—
Gorton North	45	3	2.20	6.67	95.56
Gorton South	91	3	3.00	3.30	94.51
Harpurhey	16	—	0.80	—	93.75
Levenshulme	10	—	0.52	—	90.00
Longsight	35	1	1.53	2.86	97.14
Medlock Street	87	5	3.95	5.75	98.85
Miles Platting	51	3	2.40	5.88	98.04
Moston	37	2	1.47	5.41	91.89
Moss Side East	74	5	4.00	6.76	93.24
Moss Side West	22	2	1.16	9.09	100.00
New Cross	56	9	2.49	16.07	98.21
Newton Heath	31	1	1.45	3.23	90.32
Openshaw	44	2	2.06	4.55	86.36
Oxford	3	—	4.81	—	100.00
Rusholme	40	—	1.84	—	77.50
St. Ann's	—	—	—	—	—
St. Clement's	—	—	—	—	—
St. George's	80	3	3.31	3.75	91.25
St. John's	6	—	1.41	—	100.00
St. Luke's	59	7	2.32	11.86	94.92
St. Mark's	49	4	2.34	8.16	97.96
St. Michael's	25	—	1.41	—	100.00
Withington	52	2	1.06	3.85	86.54
Wythenshawe	78	2	2.26	2.56	92.31

† Corrected; the fatal cases are those actually occurring amongst the cases notified

TABLE V.

DIPHTHERIA MORTALITY, 1937.—RATE PER 1,000 LIVING COMPARED
WITH MEAN OF FIVE YEARS.

	1932	1933	1934	1935	1936	Mean	1937
England and Wales ..	0·06	0·06	0·10	0·08	0·05	0·07	0·07
125 Great Towns	0·07	0·08	0·11	0·09	0·06	0·08	0·08
London	0·07	0·08	0·11	0·06	0·06	0·08	0·05
MANCHESTER CITY ..	0·11	0·11	0·11	0·07	0·12	0·11	0·11
148 Smaller Towns ..	0·03	0·04	0·09	0·07	0·04	0·05	0·05

THE PREVENTION OF DIPHTHERIA.

During 1937, 11,846 persons were immunised, and 821 were partially immunised against the disease.

The following table illustrates the progress of the scheme since its inception :—

TABLE A.

NUMBER OF PERSONS, IN AGE GROUPS, COMPLETELY IMMUNISED.

	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937
Under 1 year ..	..	20	162	248	212	598	595	691	963	822	1,071
1 year	3	50	269	313	331	813	743	805	1,219	1,328	1,169
2 years	5	54	226	197	254	579	613	788	1,033	863	890
3 "	8	44	221	202	206	482	733	668	1,146	782	901
4 "	16	33	238	164	210	458	744	664	1,333	801	906
5 "	9	36	269	152	208	473	921	997	1,256	702	951
6 "	19	30	281	127	186	406	1,015	987	1,309	772	972
7 "	20	17	291	105	137	365	1,002	1,076	1,242	751	890
8 "	10	20	281	82	131	336	876	1,415	1,150	810	857
9 "	4	21	230	65	107	282	852	1,301	1,241	804	678
10 "	3	7	63	62	98	231	711	1,376	1,002	923	698
11 "	5	10	39	46	62	247	486	1,061	907	703	459
12 "	2	7	42	29	36	266	345	630	825	772	419
13 "	2	6	21	22	33	119	280	438	820	615	424
14 "	2	—	4	15	22	48	76	247	191	96	117
15 years and over	—	7	41	39	48	121	67	371	1,201	917	444
Total	108	362	2,678	1,868	2,281	5,824	10,059	13,515	16,838	12,461	11,846
Total under 5 years at end of 1937											14,038
Total 5-9 years											27,460
Total 10-14 years											26,712
Total over 15 years											9,620

Total 1927-1937 77,830

The totals at the end of 1937 indicate only approximately the immune population, since no account is taken of any deaths that may have ensued subsequently.

Immunisation is carried out in the schools by part-time medical practitioners specially appointed for the work, at the maternity and child welfare centres and public health office, at the hospitals, and by general medical practitioners in their private practice.

TABLE B.
NUMBER OF PERSONS DEALT WITH IN MANCHESTER IN 1937.

	Number completely immunised	Number partially immunised
Schools	6,697	554
Child Welfare Centres	2,908	44
Hospitals	1,649	206
Public Health Office	414	14
General Practitioners	178	3
Totals	11,846	821

In the majority of cases three 1c.c. injections of T.A.M. or T.A.F. were given, the latter mainly for persons of 10 years of age and over.

Alum precipitated toxoid was also used for the immunisation of many children under the age of 8 years. An injection of 0.1c.c. followed by 0.4c.c. two weeks later was the method employed. Untoward reactions were thereby avoided and as judged by subsequent Schick tests, results appear to be satisfactory.

1,914 primary Schick tests were performed, with the result that 898 were positive, 967 negative, 46 pseudo and positive, and 3 pseudo and negative.

* ENTERIC FEVER.

Fourteen notifications of enteric fever were received in 1937, seven of which related to cases in which the diagnosis was subsequently amended. Thus 7 persons contracted enteric fever and of these 4 were infected by *B. typhosus* and 3 by *B. paratyphosus* B.

The incidence of enteric fever in 1937 was lower than has ever before been recorded in Manchester. Hitherto the year 1934 has held the low record with 14 cases.

Sources of Infection.

One patient suffering from typhoid was infected by direct contact with a person suffering from that disease. Another of the typhoid patients was infected abroad and one of the paratyphoid patients was somehow infected outside Manchester. In spite of diligent enquiry the source of infection in the remaining four cases remained undetermined.

Carriers.

Two female "carriers," A.S.F. aged 38 years and M.C.F. aged 54 years, continue to be kept under observation and no spread of infection has been traced to them.

Examination of Blood Specimens.

118 specimens of blood were submitted to the laboratory by medical practitioners in connection with cases of illness simulating enteric fever and six gave positive Widal reactions. In addition 22 specimens were obtained from members of infected households and examined with negative results.

Table I. shows the attack and death-rates compared with those for England and Wales.

TABLE I.

INCIDENCE OF AND DEATH-RATE FROM ENTERIC FEVER IN MANCHESTER.

Number of Notified Cases, Deaths, and Death-rates per 1,000 living from Enteric Fever in each of Twenty-five successive Years.

YEAR	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925
No. of cases notified and accepted ...	292	156	174	78	86	68	90	54	74	36	50	103	65
No. of deaths.	47	34	46	22	10	10	19	13	12	4	8	14	8
Death-rate — Manchester	0.06	0.05	0.06	0.03	0.01	0.01	0.02	0.02	0.02	0.01	0.01	0.02	0.01
Death-rate — England and Wales..	0.04	0.05	0.04	0.03	0.03	0.03	0.01	0.01	0.02	0.01	0.01	0.01	0.01

YEAR	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937
No. of cases notified and accepted . .	30	18	32	41	30	22	39	14	14	20	15	7
No. of deaths . . .	9	1	4	7	4	4	3	3	—	3	1	—
Death-rate — Manchester	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	—
Death-rate — England and Wales..	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.01	0.00

* Including typhoid and paratyphoid.

Table II. shows at what ages enteric fever appears to be most prevalent and also at what ages it is most fatal.

TABLE II.
ENTERIC FEVER.—NUMBER OF ATTACKS, OF DEATHS, AND
CASE FATALITY PER CENT. AT DIFFERENT AGES FOR THE
FORTY-SEVEN YEARS, 1891—1937.

Ages	1891-1937		
	Attacks	Deaths	Case Fatality Per cent.
Under 1 year	21	9	42·9
1 to 2 years	58	8	13·8
2 „ 3 „	122	17	13·9
3 „ 4 „	175	22	12·6
4 „ 5 „	233	25	10·7
5 „ 6 „	265	28	10·6
6 „ 7 „	266	26	9·8
7 „ 8 „	247	20	8·1
8 „ 9 „	265	22	8·3
9 „ 10 „	261	26	10·0
10 „ 15 „	1,515	163	10·8
15 „ 20 „	1,652	298	18·0
20 „ 25 „	1,601	313	19·6
25 „ 35 „	2,368	541	22·9
35 „ 45 „	1,169	338	29·0
45 and over	814	271	33·3
All ages	11,032	2,127	19·3

TABLE III.

ENTERIC FEVER ATTACKS IN WEEKS REPORTED IN 1937 ACCORDING TO DATE OF ONSET.

FIRST QUARTER		SECOND QUARTER		THIRD QUARTER		FOURTH QUARTER	
Week of Year	1937	Week of Year	1937	Week of Year	1937	Week of Year	1937
1	—	14	—	27	—	40	—
2	—	15	—	28	—	41	—
3	—	16	—	29	—	42	—
4	—	17	1	30	—	43	—
5	—	18	—	31	1	44	—
6	—	19	—	32	1	45	—
7	—	20	—	33	1	46	—
8	—	21	—	34	—	47	—
9	—	22	—	35	1	48	1
10	—	23	—	36	—	49	—
11	—	24	—	37	—	50	—
12	—	25	—	38	—	51	—
13	1	26	—	39	—	52	—
Total ..	1	Total ..	1	Total ..	4	Total ..	1

City total, 1937 = 7.

TABLE IV.

ENTERIC FEVER MORTALITY, 1937—RATE PER 1,000 LIVING, COMPARED WITH MEAN OF FIVE YEARS.

	1932	1933	1934	1935	1936	Mean	1937
England and Wales	0·01	0·01	0·00	0·00	0·01	0·01	0·01
London	0·00	0·00	0·00	0·00	0·01	0·00	0·00
CITY OF MANCHESTER	0·01	0·00	0·00	0·00	0·00	0·00	0·00

UNDULANT FEVER.

Two persons suffering from undulant fever were admitted to Manchester hospitals in 1937. One of the patients lived in a district outside Manchester. The other was a man aged 56 years whose blood serum agglutinated *B. Abortus* in a titre of 1 in 2,560. He was a rent collector and had no contact with cattle. A mixed sample of milk taken from the farm from which his household obtained their milk was examined with negative result. The source of his infection, therefore, was not discovered.

All blood specimens submitted to the Public Health Laboratory for Widal tests are examined for agglutination with *Br. Abortus*, the organism responsible for the occurrence of undulant fever in man, but so far as Manchester residents are concerned the examination results were negative.

CEREBRO-SPINAL FEVER.

Fifty cases of cerebro-spinal fever were notified and accepted as such in 1937, the diagnosis being confirmed bacteriologically in 40 of them. The cases were widely spread over the city and no particular focus of infection was evident.

There were 23 deaths from this disease, giving a case mortality rate of 46 per cent., which compares with a rate of 66.1 per cent. in 1936.

As regards seasonal prevalence, 18 cases occurred in the first quarter of the year, 9 in the second, 7 in the third, and 16 in the last quarter.

Except in 9 instances all the patients were removed to Monsall Hospital and treatment by serum injected intrathecally was commenced at the earliest opportunity. There is evidence which shows the value of this treatment, especially when it can be given in the early stages of the illness. Further reference is made to the results obtainable by serum treatment in the section of this report dealing with Monsall Hospital on page 202.

CASES OF CEREBRO-SPINAL FEVER IN AGE GROUPS AND SEXES, 1937.

Age Groups	No. Cases Males	No. Cases Females.	Total
0—5 years	10	10	20
5—10 „	2	4	6
10—15 „	2	1	3
15—20 „	6	3	9
20—25 „	1	3	4
25—35 „	2	3	5
35 and over	1	2	3
All Ages	24	26	50

POLIOMYELITIS.

Particulars of notified cases of poliomyelitis for 1937 are given in the following table :—

Case	Sex	Age	Ward	Onset	Notified	Paralysis	Result—Jan., 1938
	M	Years 17	Didsbury ..	Aug. 30	Sept. 14	None ..	Recovered

ENCEPHALITIS LETHARGICA.

Six notifications of encephalitis lethargica were received in 1937. Two related to persons from other districts who were admitted to City hospitals—one was found to be suffering from influenza, one was apparently an acute relapse in an old standing illness, and the remaining two occurred in a male aged 29 years and a female aged 17 years.

Seven deaths were registered in which chronic encephalitis lethargica was declared to be a contributory cause. For the most part these related to cases which had not been previously notified.

Table I. shows the fate, so far as it is known, of patients notified to be suffering from this disease between the years 1919 and 1937. It will be noted that during the last 19 years notifications were received in respect to 740 persons. 348, or 47·1 per cent., have died ; 102, or 13·8 per cent., have apparently recovered ; 252, or 34 per cent. remain alive but are either partially or wholly disabled; and 38, or 5·1 per cent., are untraceable.

There are at the present time 105 persons with chronic encephalitis lethargica in the municipal hospitals. Many of these cases were un-notified in the acute stages of illness.

TABLE I.
FATE OF ENCEPHALITIS LETHARGICA PATIENTS, 1919-1937.
Patients under 16 years at time of notification.

Years	Total No. of cases notified	A No. known to be alive and well	B No. suffering from sequelæ		No. (among B) in whom changes of character have occurred	No. (among B) in whom Parkinson- ism has supervened	C No. of Patients known to have died				D No. of Patients untraced
			Interfering with normal schooling or occupation	Preventing normal schooling or occupation			0-1 months after onset	2-6 months	7-12 months	Over 1 year after onset	
1919-23	41	7	7	2	4	5	17	3	1	4	—
1924-28	157	33	32	25	18	19	35	7	—	19	6
1929-33	17	4	—	5	—	—	6	—	1	—	1
1934 ..	—	—	—	—	—	—	—	—	—	—	—
1935 ..	1	—	—	1	—	—	—	—	—	—	—
1936 ..	—	—	—	—	—	—	—	—	—	—	—
1937 ..	—	—	—	—	—	—	—	—	—	—	—
Total	216	44	39	33	22	24	58	10	2	23	7

Patients 16 years and over when notified.

1919-23	64	9	12	4	4	10	20	10	3	5	1
1924-28	371	46	48	79	2	61	51	31	9	80	27
1929-33	78	3	10	19	—	7	14	6	3	20	3
1934 ..	6	—	4	—	—	—	2	—	—	—	—
1935 ..	2	—	—	1	—	—	1	—	—	—	—
1936 ..	—	—	—	—	—	—	—	—	—	—	—
1937 ..	3	—	—	3	—	1	—	—	—	—	—

BACTERIOLOGICAL EXAMINATIONS MADE FOR THE
COUNTY BOROUGH OF MANCHESTER DURING
THE YEAR 1937, PUBLIC HEALTH LABORATORY,
UNIVERSITY OF MANCHESTER.

Month	Diphtheria		Typhoid	Tuberculosis				Water	
				Sputum		Milk		Bacterio- logical	Chemical
	Total	+	Total	Total	+	Total	+	Total	Total
January	999	124	15	138	13	100	7	—	—
February	868	79	54	158	18	111	5	—	—
March	735	93	32	146	17	147	18	34	16
April.. .. .	854	93	12	197	25	141	14	—	—
May	798	81	16	129	17	113	9	—	—
June	1124	105	16	157	25	143	5	45	14
July	2805	200	7	136	17	121	12	—	—
August	715	85	13	106	19	134	8	—	—
September	1114	158	18	132	20	144	9	79	39
October	1196	136	4	153	15	163	19	—	—
November	1403	129	9	135	10	211	18	—	—
December	1010	125	11	127	16	172	18	23	23
Total	13621	1408	207	1714	212	1700	142	181	92

Total specimens enumerated above 17,515. Other investigations 1,670 as under :—

Milks—Coli, etc.	666
„ Chemical examinations	180
„ Methylene blue reduction test.. .. .	158
„ Microscopical for tubercle bacilli	18
Diphtheria—Virulence tests	403
Agyrol—Chemical Examination	1
Swabs—Vincent’s angina	7
Various specimens examined for typhoid, etc.	51
Cerebro-spinal fluid	29
Cultivation tests	103
Maternity outfits	5
Water, microscopical examination.. .. .	3
Urine, chemical examination	1
Milk, acidity test	2
Tuberculosis, various specimens examined for	42
Specimen for tuberculosis and typhoid	1
	<u>1,670</u>

MEASLES AND GERMAN MEASLES.

Cases notified	1937				
	1st quarter	2nd quarter	3rd quarter	4th quarter	Total
MEASLES—					
By Doctors	147	447	623	4,171	5,388
„ Others	26	74	111	951	1,162
Total	173	521	734	5,122	6,550
GERMAN MEASLES—					
By Doctors	159	376	118	87	740
„ Others	17	44	16	7	84
Total	176	420	134	94	824

The deaths from measles in successive years are shown in the following table :—

TABLE I.

DEATHS FROM MEASLES IN THE CITY OF MANCHESTER DURING THE
TEN YEARS, 1928–1937.

Under One Year				Years of Age				5 Years and upwards	Total deaths at all ages
Years	Under 3 Months	3-5 Months	6-11 Months	1-	2-	3-	4-		
1928	1	5	41	43	22	4	5	2	123
1929	0	1	17	28	4	6	2	2	60
1930	1	6	32	61	20	13	6	7	146
1931	2	5	4	28	11	8	2	5	65
1932	0	2	24	55	14	11	5	11	122
1933	0	0	7	23	4	4	5	5	48
1934	1	4	13	40	12	7	11	9	97
1935	0	3	13	51	7	10	11	3	98
1936	0	5	32	46	13	7	5	13	121
1937	1	0	8	16	6	4	5	5	45

TABLE 2.
INCIDENCE OF MEASLES IN MANCHESTER DURING THE YEAR 1937,
ACCORDING TO AGE GROUPS.

Disease	Under 5 years	5 years and over	Total
Measles	4,043	2,507	6,550

TABLE 3.—MEASLES, DEATHS IN QUARTERS.

YEAR	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Whole Year
1901-1910 (mean) .	80	122	68	59	329
1911-1920 (mean) .	87	125	33	32	277
1921-1930 (mean) .	51	62	26	30	159
1931	3	9	3	50	65
1932	89	30	1	2	122
1933	1	2	6	39	48
1934	88	7	1	1	97
1935	1	2	5	90	98
1936	104	17	—	—	121
1937	2	3	3	37	45

TABLE 4.—MEASLES MORTALITY RATES.—RATE PER 1,000 LIVING,
COMPARED WITH MEAN OF FIVE YEARS.

	1932	1933	1934	1935	1936	Mean 5 years	1937
England and Wales . .	0·08	0·05	0·09	0·03	0·07	0·06	0·02
125 Great Towns . .	0·11	0·06	0·12	0·04	0·09	0·08	0·03
London	0·19	0·02	0·20	0·00	0·14	0·11	0·01
CITY OF MANCHESTER.	0·16	0·06	0·13	0·13	0·16	0·13	0·06
148 Smaller Towns . .	0·06	0·04	0·07	0·03	0·04	0·05	0·02

WHOOPIING COUGH.

The cases of this disease notified are obtained entirely through the schools and the same disabilities attach to this mode of notification as were experienced in measles. Notwithstanding, these notifications are useful. The cases are visited and dealt with by the Health Visitors in the same manner as cases of measles.

Whooping cough notifications during 1937 :—

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Total
1937 	316	568	374	145	1,403

TABLE I.

WHOOPIING COUGH MORTALITY.—RATE PER 1,000 LIVING, COMPARED
WITH MEAN OF FIVE YEARS.

	1932	1933	1934	1935	1936	Mean 5 years	1937
England and Wales ..	0·07	0·05	0·05	0·04	0·05	0·05	0·04
125 Great Towns ..	0·08	0·06	0·06	0·04	0·06	0·06	0·04
London 	0·08	0·08	0·07	0·04	0·06	0·06	0·06
CITY OF MANCHESTER.	0·10	0·06	0·05	0·06	0·06	0·07	0·07
148 Smaller Towns ..	0·06	0·04	0·02	0·03	0·04	0·04	0·03

TABLE 2.—WHOOPIING COUGH, DEATHS IN QUARTERS.

Year	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Whole Year
1911–1920 (Mean)	59	73	24	17	173
1921–1930 (Mean)	48	52	15	15	130
1931 	31	15	18	22	86
1932 	39	27	7	7	80
1933 	16	14	8	9	47
1934 	14	12	6	3	35
1935 	6	18	14	8	46
1936 	21	12	10	4	47
1937 	18	24	9	2	53

TABLE 3.

INCIDENCE OF WHOOPING COUGH (KNOWN CASES) IN MANCHESTER
DURING THE YEAR 1937 ACCORDING TO AGE GROUPS.

Disease	Under 5 years	5 years and over	Total
Whooping Cough	1,180	223	1,403

A COMPARISON OF MORTALITY FROM SCARLET FEVER, DIPHTHERIA,
MEASLES, AND WHOOPING COUGH.

YEAR	WHOOPING COUGH		MEASLES		SCARLET FEVER		DIPHTHERIA	
	Known Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths
1928	3,189	89	7,141	123	2,100	14	1,033	99
1929	4,037	220	9,512	60	2,318	11	761	57
1930	1,388	37	10,738	146	3,701	16	838	58
1931	3,150	86	7,771	65	2,913	8	573	60
1932	2,280	80	12,238	122	2,283	17	885	82
1933	2,230	47	6,350	48	1,773	18	732	86
1934	1,565	35	11,383	97	2,080	14	866	84
1935	1,632	46	9,907	98	2,795	15	903	57
1936	1,457	47	8,807	121	2,402	10	1,202	92
1937	1,403	53	6,550	45	2,578	9	1,397	90
Total	22,331 *	740	90,397	925	24,943	132	9,190	765
Manchester— Case fatality rate per cent.	3·3		1·0		0·5		8·3	

* It should be pointed out that the estimated number of cases (22,331) occurring during the 10 years does not represent all the actual cases. Since this disease is not notifiable by medical practitioners, many cases escape our notice.

DIARRHŒA.

TABLE 1.—1937.—DIARRHŒA AND SIMPLE CHOLERA MORTALITY :
DEATHS UNDER TWO YEARS OF AGE PER 1,000 BIRTHS,
COMPARED WITH THE MEAN OF FIVE YEARS.

	1932	1933	1934	1935	1936	Mean 5 years	1937
England and Wales ..	6·6	7·1	5·5	5·7	5·9	6·4	5·8
125 Great Towns ..	8·9	9·4	7·4	7·9	8·2	8·4	7·9
London	12·6	11·6	12·6	11·2	14·4	12·5	12·0
CITY OF MANCHESTER.	8·6	8·6	11·2	7·5	6·1	8·4	6·7
148 Smaller Towns ..	4·5	4·9	3·6	3·8	3·4	3·2	3·2

The number of deaths in successive years, and their distribution in quarters of the year, are exhibited in the following figures :—

TABLE 2.—DIARRHŒA AND SIMPLE CHOLERA DEATHS IN QUARTERS
1928–1937.

	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937
First Quarter	44	38	46	55	32	28	29	18	29	20
Second Quarter	48	45	39	34	33	30	41	25	12	17
Third Quarter	42	38	26	28	27	17	29	23	15	22
Fourth Quarter	64	58	42	31	24	21	29	19	17	21
	198	179	153	148	116	96	128	85	73	80

DYSENTERY.

Five cases of dysentery came to the notice of the department during the year.

The six cases of dysentery and five carriers which are known to the Department have been visited each six months. The investigation of the health of the members of the patients' families revealed no suspicious symptoms.

MALARIA.

No cases of malaria were notified in 1937.

ANTHRAX.

No cases of anthrax were notified during the year 1937.

FOOD POISONING.

There was an outbreak of bacterial food poisoning in June involving 23 persons between the ages of 8 and 41 years. On the 14th June eleven cases were notified to the Medical Officer of Health. These occurred among the pupils and staff at a residential school for girls. Most of the pupils had left for the holidays and eleven persons who remained were taken ill with gastro-enteritis—two of them seriously—within 24 hours of a meal consisting chiefly of pork pies. The pies were bought from a shop on June 12th and eaten on the same day. Only those persons who ate any were affected. Subsequently a further 12 cases in the neighbourhood came under notice and in each case pork pies purchased from the same shop on the same day had been eaten. The incubation periods ranged from 12 to 25 hours, the average being 15. There were no deaths. *B. aertrycke* was isolated from the stools of the majority of cases in the early stages and in subsequent serological tests the organism was agglutinated in diagnostic titre. None of the suspected pies was available for bacteriological examination but one of the same batch taken from the shop gave a pure culture of *B. aertrycke*. There was evidence in the bakehouse of infestation by mice and the bacillus was isolated from the intestine of a mouse that was caught. There seems little doubt that the mice were responsible for the outbreak especially as full investigation failed to discover any other likely source of infection. The result of further enquiry suggested that the pies were infected by the addition of gravy which had become contaminated before being used. The bakehouse was thoroughly cleansed, machinery and utensils disinfected, and the necessary steps taken to clear the premises of mice.

In addition to the above, 10 cases of suspected food poisoning were reported to the department during the year. Each case was investigated but the laboratory findings were negative throughout.

One other case of food poisoning was reported in December in which *B. aertrycke* was isolated from the faeces of the patient. Two days after admission to hospital the patient died and the post mortem examination revealed signs of gastro-enteritis. Investigations failed to discover the food from which the organism originated.

PUBLIC HEALTH (MEAT) REGULATIONS, 1924.

These regulations, which came into force on May 1st, 1925, are administered by the Public Health Committee in so far as Part V., which relates to shops, stores, etc., is concerned. With a view to the equitable administration of the regulations, the co-operation of the interested trades was sought at the time the regulations came into force and mutual agreement with the associations concerned was arrived at on the following points :—

Requirements.

1. Meat shall not be hung outside premises.
2. All meat which is displayed must be protected from the dust of the streets by glass windows.
3. Reasonable precautions must be taken to protect meat from flies.
4. The provision of covered receptacle of suitable material for refuse and sweepings is imperative, and the receptacle must be kept clean.
5. Shops must be adequately ventilated.

These agreed conditions have greatly facilitated the administration of the Meat Regulations. This strikingly illustrates the value of conference between the Public Health Committee and accredited representatives of interested trades as a preliminary to administration of such regulations.

207 visits were paid during the year to meat shops by the special inspectors, and it was found that these requirements and suggestions were generally being carried out.

REPORT FROM MARKETS DEPARTMENT AS TO
SUPERVISION OF MEAT AND OTHER FOODS.

The Medical Officer of Health is indebted to the General Manager for the following particulars relating to the operations of the Markets Department during the year ended 31st March, 1937.

The number of animals slaughtered at the city abattoir during certain years is shown in the subjoined statement "A."

The bulk of the meat, fish, and fruit which is condemned is found to be unfit for food on arrival at the markets, railway stations, and wholesale houses. An efficient system of inspection at the centre of distribution lessens the risk of diseased meat, etc., being exposed for sale in retail shops.

The staff of inspectors comprises 1 chief veterinary inspector, 3 assistant veterinary inspectors, and 10 meat, fish, etc., inspectors.

Statement "B" shows the total condemnations in the city and statement "C" the total weight of meat condemned at the city abattoir and wholesale meat market.

Statement "A."

ANIMALS SLAUGHTERED AT CITY ABATTOIR DURING CERTAIN YEARS.

Year ended 31st March	Cattle	Sheep	Lambs	Calves	Pigs
1910	38,389	193,855	57,553	2,179	10,486
1920	89,143	214,363	48,656	8,202	9,636
1930	73,244	272,868	119,299	5,472	15,259
1931	64,354	240,219	106,091	5,246	14,945
1932	57,418	308,249	95,079	5,474	17,776
1933	56,083	337,398	135,202	6,079	15,460
1934	60,109	333,947	153,408	7,852	11,868
1935	67,735	296,767	146,082	10,067	13,003
1936	77,239	411,464		10,628	14,216
1937	74,560	435,204		11,553	12,586

Statement "B."

TOTAL CONDEMNATION OF VARIOUS FOODSTUFFS DURING 1931-37.

Kind of Food	1931	1932	1933	1934	1935	1936	1937
	Tons	Tons	Tons	Tons	Tons	Tons	Tons
Meat	434½	399¼	458	537¾	601½	703¾	707¾
Fish	135	106¾	102½	108¼	110½	100¾	102½
Fruit	49½	42¾	24½	43¾	70	51¼	65½
Vegetables	179½	137¾	307	113¼	167½	180¼	311
Eggs (number) .. .. .	..	4,149	..	4,224	5,560	7,608	15,942
Game (head)	338	122	147	518	1,136	1,329	591
Poultry (head)	3,544	4,582	5,577½	5,458	5,384	3,504	6,069
Rabbits (head)	9,107	10,401	8,932	7,111	18,717	12,206	35,949

MEAT CONDEMNED AT THE CITY ABATTOIR AND WHOLESALE MEAT MARKET DURING 1931-37.

Particulars	1931	1932	1933	1934	1935	1936	1937
	Tons	Tons	Tons	Tons	Tons	Tons	Tons
Total weight of meat condemned at the city abattoir and wholesale meat market	403 $\frac{3}{4}$	368	426 $\frac{1}{2}$	505 $\frac{3}{4}$	565 $\frac{3}{4}$	663 $\frac{1}{4}$	655
Of which the weight of dressed meat consigned from places other than the city was ..	181 $\frac{1}{4}$	160	180 $\frac{1}{4}$	194 $\frac{3}{4}$	244 $\frac{3}{4}$	266 $\frac{1}{2}$	253
Included in which were imported offals amounting to	2 $\frac{1}{2}$	1	4 $\frac{1}{2}$	4 $\frac{1}{4}$	2	1 $\frac{1}{2}$	1

UNWHOLESOME FOOD CONDEMNED DURING 1934-37.

Kind of Food	1934-35	1935-36	1936-37
	lbs.	lbs.	lbs.
MEAT :—			
Beef	1,155,610	1,374,382	1,392,420
Mutton	30,952	34,401	34,104
Veal	23,277	23,901	28,540
Venison	353	468	112
Pork	132,835	140,060	127,928
Imported offal	4,585	3,420	2,113
	1,347,612 = 601 $\frac{1}{2}$ tons	1,576,632 = 703 $\frac{3}{4}$ tons	1,585,217 = 707 $\frac{3}{4}$ tons
FISH :—			
Fish	222,527	215,094	218,744
Shellfish	24,811	10,818	11,043
	247,338 = 110 $\frac{1}{2}$ tons	225,912 = 100 $\frac{3}{4}$ tons	229,787 = 102 $\frac{1}{2}$ tons

UNWHOLESOME FOOD CONDEMNED—continued

	1934-35	1935-36	1936-37
	HEAD	HEAD	HEAD
GAME	1,136	1,329	591
POULTRY	5,384	3,504	6,069
RABBITS	18,717	12,206	35,949
	LBS.	LBS.	LBS.
FRUIT	156,713 = 70 tons	115,196 = 51½ tons	146,022 = 65½ tons
VEGETABLES	375,042 = 167½ tons	403,725 = 180¼ tons	696,752 = 311 tons
MISCELLANEOUS :—	NO.	NO.	NO.
Eggs	5,560	7,608	15,942
	LBS.	LBS.	LBS.
Condensed milk	183	—	244
Sundry provisions	1,839	1,937	3,720

With the exception of the following, which were seized while deposited or exposed for sale, the quantities given in the preceding tables were surrendered after being condemned by inspectors of the department :—

	1934-35	1935-36	1936-37
	LBS.	LBS.	LBS.
Meat	4½	285	—
Fish	—	—	—
	HEAD	HEAD	HEAD
Poultry	—	—	17
	LBS.	LBS.	LBS.
Fruit.. .. .	215	120	1,690
Vegetables	—	—	7,578
Sundry provisions	4	—	2,356

NOTE.—The term “surrendered” includes cases in which inspectors have discovered unwholesome food in the course of their duty, but in which, owing to the salesman’s acceptance of the inspector’s decision it has been deemed unnecessary to obtain a magistrate’s order prior to destruction.

CARCASES INSPECTED AND CONDEMNED.

		Cattle		Calves	Sheep and Lambs	Pigs
		Excluding Cows	Cows			
Number killed and Inspected	A	57,387	12,647	9,376	408,549	11,130
Do. do.	B	*3,462	Not known	1,205	18,153	6,803
Number brought in dead and inspected ..	C	*7,646	Not known	15,462	8,301	35,409
ALL DISEASES EXCEPT TUBERCULOSIS.						
Whole carcasses condemned	A	*84	Not known	26	559	34
	B	*14	Not known	18	59	47
	C	*604	Not known	374	189	291
Carcases of which some part or organ was condemned	A	*4,353	Not known	22	156	501
	B	*326	Not known	5	16	306
	C	*1,266	Not known	29	32	402
Percentage of the number inspected affected with disease other than tuberculosis	A	6.3		51	17	4.8
	B	9.8		1.9	41	5.2
	C	24.5		2.6	2.7	1.96
TUBERCULOSIS ONLY.						
Whole carcasses condemned	A	106	520	6	Nil	21
	B	6	39	5	Nil	16
	C	*210	Not known	10	Nil	98
Carcases of which some part or organ was condemned	A	1,876	3,138	6	Nil	898
	B	131	151	5	Nil	582
	C	*1,398	Not known	8	Nil	1,904
Percentage of the number inspected affected with tuberculosis	A	3.5	28.9	13	Nil	8.3
	B	9.4		83	Nil	8.8
	C	21.0		12	Nil	5.7

There is no meat marking scheme under Part III. of the Public Health (Meat) Regulations, 1924, in force in this City.

- NOTES.
- A—Animals killed at the City Abattoir.
 - B—Animals killed at Rusholme Abattoir and other private slaughter-houses.
 - C—Animals killed elsewhere in British Isles and brought into the City Abattoir.
 - * These figures *include* cows, separate records not being kept.
 - All figures given are for the calendar year 1937.

VETERINARY AND MILK CONTROL SECTION.

R. C. LOCKE, M.R.C.V.S., D.V.S.M. (Vict.),

Veterinary Officer.

The work of this section of the Public Health Department is administered under the following Acts and Orders:—

Milk and Dairies (Consolidation) Act, 1915 ..	}	Dealing with milk and milk products
Milk and Dairies (Amendment) Act, 1922 ..		
Milk (Special Designations) Order, 1936 ..		
Milk and Dairies Order, 1926		
Manchester Corporation (General Powers) Act, 1899, section 18	}	Dealing with ice-cream
Manchester Corporation (General Powers) Act, 1930, section 32 (1) (b)		

During the year the Agriculture Act, 1937, came into force. One of the main functions of this Act is to establish a national service of veterinary inspectors to combat the diseases of animals.

Local authorities will retain all their functions in relation to meat inspection and those under the Milk and Dairies Acts and Orders and under any other enactments relating to milk except only in relation to the veterinary inspection of animals.

The transfer of the veterinary functions of local authorities to the Ministry of Agriculture and Fisheries will involve the transfer to the veterinary staff of the Ministry of those whole-time veterinary inspectors of local authorities at present engaged in transferable duties. It was first proposed that this Act should become operable on January 1st, 1938, but this was postponed to April 1st, 1938.

In July, a White Paper was issued outlining the Government's policy regarding the milk industry. One of the main proposals is to permit local authorities to apply for an Order making compulsory the efficient pasteurisation of all milk retailed in its area. In the event of such an Order being made, it would not become operable for a period of two years.

The work carried out by the section is summarised in tabular form at the conclusion of this report, and it will be seen that similar measures have been taken as in the past to supervise the milk supply of the City.

City Farms.

There has been a reduction in the number of farm premises from 58 to 56 with a corresponding decrease of cattle accommodation from 1500 to 1,450. It is possible that this number will be still further reduced in the near future, due to the development of land for housing purposes.

Bulk sampling of the milk from each farm has been carried out as in previous years, in addition to periodical examination of the cattle, and as a result six cows suffering from tuberculosis of the udder have been discovered and slaughtered under the Tuberculosis Order, 1925.

There is one producer of "Tuberculin Tested" milk in the City and ten producers of "Accredited" milk. The necessary quarterly examinations of the herds have been carried out by the Veterinary Officer, and samples of the milk have been taken for bacteriological examination at regular intervals. The conditions of production at these farms have been generally satisfactory.

Country Farms.

The examination of milk supplied to the City from farms outside the boundary was carried out as in previous years. Bulk samples from 1,043 such farms were examined by the biological test for tubercle bacilli and 105 gave a positive result. It is gratifying to be able to report that the incidence rate (10·07 per cent.) is lower than that for 1936 (12·03 per cent.) and is 1·19 per cent. lower than that for the past 36 years. It is possible that the establishment of whole-time veterinary staffs in the counties from which the bulk of the City's milk supply is derived is beginning to have some effect on the incidence rate. This improvement must, of course, be very gradual.

In the report for 1936, mention was made of four samples of milk from "Tuberculin Tested" herds having proved to contain *b. tuberculosis* on biological examination, but examination of the herd in each case failed to discover a cow with tuberculosis of the udder, and the cause of the infection was not satisfactorily explained. During this year, two samples of milk from "Tuberculin Tested" herds proved to contain *b. tuberculosis* on biological examination. In one case, examination of the herd failed to discover a cow with tuberculosis of the udder, although there had been movements of reacting cows from the herd. In the other case, a cow with a tuberculous udder was found and also a cow suffering from pulmonary tuberculosis.

The number of "Accredited" herds in the country continues to increase and there has also been a large increase in the number of "Tuberculin Tested" herds. This latter increase however is not very evident in the North-West of England, but in areas such as South Wales and South Scotland.

City Dairies and Milkshops.

The milkshops inspectors have paid over 6,000 visits of inspection to dairies and milkshops. Particular attention has been directed to the general cleanliness of the premises and to the nature of the stock sold along with milk. Generally speaking the standard of cleanliness has been maintained at a high level.

It was found necessary to institute legal proceedings in respect of only one contravention of the Milk and Dairies Acts and Orders. Particulars of this prosecution is given in Table IV. A conviction was obtained in this case.

The working of the pasteurising plants at the dairies licensed for this purpose, and a system whereby each plant is tested once monthly for efficiency, has been carried out by the milkshops inspectors in addition to their routine visits.

Ice-cream.

The number of premises registered for the manufacture and/or sale of ice-cream continues to increase, there now being 646 such premises on the register, against 619 in 1936. The increase is mainly confined to shops from which ice-cream is sold but not manufactured. Conditions required before registration is acceded to and the supervision exercised over ice-cream premises follow the same general line as that adopted for dairies and milkshops. Many shops, on account of the nature of the stock kept, have been permitted to sell ice-cream only in sealed packets. 2,064 visits of inspection have been made by the milkshops inspectors and the general standard of cleanliness has been good. No prosecutions were instituted during the year although a number of warnings was required (see Table VI.).

Manchester Corporation Hospitals' Milk Supply.

The pasteurised milk supplied to the Corporation hospitals and institutions has been sampled regularly and frequently. The results of the examinations have shown that the high standard of quality and cleanliness of previous years has been maintained and on no occasion was the milk found to be infected with *b. tuberculosis*.

Samples of the raw milk supplied to Monsall Hospital and Rose Hill Convalescent Home have also been frequently examined and have shown a similar standard of excellence.

Milk produced at the Langho Colony farms has again been supplied to the Langho Epileptic Colony and Booth Hall Hospital. The herd has been subjected to a monthly clinical veterinary inspection and the milk has given excellent results bacteriologically, chemically and in regard to freedom from tuberculosis.

Similar excellent results have been obtained from the samples of milk examined monthly from the herd at Abergele Sanatorium farm. This herd has been regularly examined and supervised by the Veterinary Officer during the year.

General.

The supply of pasteurised milk to schoolchildren under the Milk-in-Schools scheme of the Milk Marketing Board has been continued and regular sampling of the milk to ensure compliance with the required standard has been carried out.

The milk bar movement appears to have taken well and there are now eight milk bars in the City. Although these milk bars are intended mainly for consumption on the premises (which would place them in the “café” category and so exempt them from registration), they are also open to sell milk off the premises, and it was necessary, therefore that they should be registered and supervised by the milkshops inspectors in the same way as milksh ops. They are well equipped with the most modern hygienic fittings and utensils and a high standard of cleanliness exists.

APPENDIX.
TABLE I.
PARTICULARS OF VISITS TO FARMS.

<i>City Farms.</i>	
Total number of farms in city	56
accommodation for 1,450 cows.	
Number of visits paid to farms by Veterinary Officer	104
„ cowsheds inspected	253
„ cows examined	2,158
„ cows suffering from tuberculosis of the udder ..	6
<i>Country Farms.</i>	
Number of visits paid to farms by Veterinary Officer	43
„ cowsheds inspected	134
„ cows examined	1,304
„ cows found with tuberculous udders	110
„ cows removed from farms prior to visits of Veterinary Officer	61

TABLE II.
PARTICULARS OF MILK SAMPLES.

<i>Samples Examined for Tubercle Bacilli.</i>										
Collected by Food and Drugs Inspectors at—										
(a)	Railway stations	..	..	..	..	..	..	..	..	..
(b)	Vehicles entering the city by road	..	..	..	..	..	..	..	..	836
Collected by Milkshops Inspectors at—										
(a)	Hospitals and institutions	..	..	..	..	..	..	..	..	106
(b)	City dairies and milkshops	..	..	..	..	..	..	..	..	143
(c)	Vehicles	..	..	..	..	..	..	..	..	537
(d)	Railway stations	..	..	..	..	..	..	..	..	2
(e)	City farms	..	..	..	..	..	..	..	..	61
(f)	Schools	..	..	..	..	..	..	..	..	14
Number of samples taken at corporation farms										13
" " " city farms by Veterinary Officer										31
TOTAL										1,743
<i>Samples Examined for Chemical Analysis, Bacterial Count, Bacillus Coli, etc.</i>										
Collected by milkshops inspectors at hospitals, dairies, vehicles, schools, etc.										*1,009

*Of these, 524 were also examined for Tubercle Bacilli.

TABLE III.
ANALYSIS OF FARMS TESTED FOR TUBERCLE BACILLI IN MILK
DURING THE YEAR.

County	No. of farmers represented by samples of milk	No. of farmers sending tuberculous milk	Percentage
Cheshire	564	56	9.93
Lancashire	150	16	10.67
Derbyshire	149	15	10.07
Staffordshire	146	15	10.27
Shropshire	3	1	33.33
Cumberland	2	..	..
Yorkshire	26	1	3.85
Roxburghshire	2	..	..
Montgomeryshire	1	1	100.00
	1,043	105	10.07

TABLE IV.

THE MILK AND DAIRIES (CONSOLIDATION) ACT, 1915,
THE MILK AND DAIRIES (AMENDMENT) ACT, 1922, and ORDERS.

Number of registered premises—December 31st, 1937.. .. .	905
„ visits to dairies and milkshops by Milkshops Inspectors	6,233
„ applications for registration approved	47
„ applications for registration refused	3
„ persons removed from register by resolution of City Council .. .. .	..
„ milk vessels found uncovered	31
„ milk vessels found dirty	2
„ milkshops found dirty	19
„ premises found in disrepair	5
„ premises with unsatisfactory washing facilities.. ..	5
„ milk conveyances found dirty	6
„ milk conveyances without name and address	16
„ milk purveyors found bottling milk in street	1
„ sites inspected for new dairies	6
„ persons warned for opening bottles of milk	8
„ prosecutions taken in respect of bottling milk in street	1

TABLE V.

MILK (SPECIAL DESIGNATIONS) ORDER, 1936.

Licences issued during the year.

Producer's licence to use the designation "Tuberculin Tested" ..	1
Dealer's licence to use the designation "Tuberculin Tested" ..	51
Producer's licence to use the designation "Accredited"	11
Dealer's licence to use the designation "Accredited"	20
Dealer's licence to use the designation "Pasteurised":—	
(a) Pasteurising establishments	15
(b) Shops	9
Supplementary licence to use the designation "Tuberculin Tested"	8
Supplementary licence to use the designation "Accredited" ..	5
Supplementary licence to use the designation " Pasteurised " ..	5

TABLE VI.
ICE CREAM.

Number of registered premises, 31st December, 1937—		
	<i>Purpose.</i>	
	Manufacture for sale	29
	Sale	489
	Manufacture for sale and sale..	128
		<hr/> 646
Number of visits to ice cream premises by milkshops inspectors..		2,064
„	applications for registration approved	59
„	applications for registration refused	4
„	sites for new premises inspected	12
„	persons warned for using dirty utensils	10
„	„ „ leaving ice cream mixture un- covered	35
„	„ „ having dirty clothing.. .. .	..
„	„ „ using dirty premises	7
„	premises found unregistered	40
„	„ with unsatisfactory washing facilities	5

Of the 489 premises registered for the sale of ice-cream, 121 are registered for the sale of this commodity in sealed packets only, the reason being that certain articles, classified as “objectionable” are stocked or sold alongside the ice-cream and which would tend to contaminate the ice-cream if it were not in properly sealed packets.

TABLE VII.

TUBERCULOUS INFECTION IN MILK 1901—1937.

YEAR	Number of farmers represented by samples of milk	Number of farmers sending tuberculous milk	Percentage	Percentage of Farmers from EACH COUNTY whose Milk was proved to contain Tubercle Bacilli							
				Cheshire	Derbyshire	Staffordshire	Shropshire	Lancashire	Yorkshire	Cumberland	Montgomeryshire
1901	272	27	9.90	10.46	9.23	8.00	10.00	..	..	..	..
1902	345	36	10.40	12.72	8.65	4.01	..	8.31	..	..	..
1903	329	45	13.60	14.76	9.58	15.15	40.00	..	..	..	..
1904	318	29	9.10	11.17	6.02	..	..	7.14	25.00	..	..
1905	565	47	8.30	10.26	6.00	6.38	..	2.98	12.50	..	..
1906	542	42	7.70	8.60	6.50	9.30	12.50	4.00	..	..	..
1907	562	38	6.76	7.71	4.48	6.94	12.50	3.70	..	..	..
1908	289	27	9.34	11.56	6.25	7.70	..	2.94	12.50	..	..
1909	535	31	5.79	4.80	7.47	8.57	11.11	3.33	..	..	..
1910	468	30	6.41	6.20	8.69	5.55	..	..	..	..	..
1911	494	51	10.32	11.11	2.50	12.12	10.00	12.20	50.00	..	..
1912	484	54	11.15	12.94	4.00	10.20	33.33	6.00	10.00	..	..
1913	486	60	12.51	13.99	11.58	9.26	33.33	5.88	20.00	..	..
1914	352	34	9.66	12.39	8.19	..	..	2.77	..	..	..
1915	69	9	13.04	16.21	..	..	..	13.63	..	..	..
1916	321	38	11.83	11.59	8.80	13.04	..	6.97	..	..	..
1917	365	37	10.13	13.54	9.30	4.30	..	11.70	..	..	..
1918	288	18	6.25	8.17	5.12	4.16	..	3.57	..	..	..
1919	240	20	8.30	8.84	8.00	4.55	..	8.10	..	..	..
1920	194	29	14.94	18.75	10.71	..	..	5.88	..	..	..
1921	305	37	12.13	16.23	4.17	..	..	10.52	..	..	..
1922	243	21	8.64	10.52	6.34	6.66	..	3.57	..	..	..
1923	296	33	11.14	12.94	7.14	10.34	..	9.75	..	..	..
1924	453	43	9.49	10.80	8.69	8.82	..	5.12	..	..	..
1925	292	24	8.21	10.00	11.86	4.34	..	..	..	..	..
1926	474	49	10.33	12.26	11.76	6.94	..	5.76	..	..	..
1927	604	67	11.09	14.11	4.62	6.52	..	14.81	..	..	..
1928	694	122	17.57	18.10	24.50	16.83	33.33	10.00	..	22.22	50.00
1929	697	88	12.62	12.85	13.00	13.84	..	9.89	42.85	..	..
1930	750	107	14.26	17.01	14.28	11.62	..	8.10	..	..	..
1931	896	145	16.18	20.13	16.77	7.85	20.00	15.78	..	..	..
1932	818	115	14.05	17.39	8.51	11.42	5.00	12.63	8.33	..	20.00
1933	927	111	11.97	14.48	6.85	14.65	..	10.40	3.70	..	..
1934	912	109	11.95	14.22	11.19	8.69	..	10.00	4.76	..	..
1935	1,035	136	13.14	15.19	11.71	9.24	..	11.71	9.99	..	..
1936	1,031	124	12.03	13.89	8.69	9.55	..	8.51	12.00	50.00	..
1937	1,043	105	10.07	9.93	10.07	10.27	33.33	10.67	3.85	..	100.00
Total				18,988	Total	2,138	Aver'ge	11.26			

TABLE VIII.

ANALYSIS OF SAMPLES OF MILK TESTED AND RESULTS OF INVESTIGATIONS AT FARMS DURING THE YEAR.

SOURCE OF SAMPLES		NUMBER OF SAMPLES EXAMINED FOR TUBERCLE BACILLI				Number of visits paid to farms	Number of cows examined	COWS WITH TUBERCULOUS UDDERS				
		Primary and subsequent	Control	Total	Positive results			Condemned on clinical examination	Discovered on microscopical examination of milk	Discovered on biological examination of milk	Removed from farm prior to visit	Discovered by local authority prior to result of sample.
By Food and Drugs Inspectors	Railway stations...	..	..	..	..	..	..	..	..	..	..	..
	Carts and city dairies	800	36	836	*80	..	..	..	..	..	..	..
By Milkshops Inspectors	Hospitals and institutions...	106	..	106	..	..	..	..	..	..	..	..
	Vehicles, city farms, city dairies, railway stations, and schools	716	41	757	†55	..	..	..	..	..	..	..
By Veterinary Officer	Country farms { individual group	..	..	..	..	43	1,304	9	56	32	61	13
	City farms { individual group	26	..	26	3	104	2,158	1	4	1	..	..
	Corporation farms { individual mixed	..	..	..	..	..	..	..	..	..	..	..
Totals		1,666	77	1,743	140	147	3,462	10	60	33	61	13

* Includes 9 control samples.

† Includes 5 control samples.

TABLE IX
GRADED AND UNGRADED MILKS—TUBERCULOSIS RATE.

" TUBERCULIN TESTED "			" ACCREDITED "			PASTEURISED		
No. of samples taken	Positive T.B. results	Percentage	No. of samples taken	Positive T.B. results	Percentage	No. of samples taken	Positive T.B. results	Percentage
61	2	3.28	91	15	16.48	260	..	..

	GRADED MILKS (excluding " Pasteurised ")	PASTEURISED	UNGRADED MILK	TOTAL MILKS
Total Number of Samples taken ..	152	260	1,331	1,743
Positive T.B. results	17	..	123	140
Percentage	11.18	..	9.24	8.03

N.B.—If the " PASTEURISED " figure is included with that of " GRADED MILKS " the percentage would decrease to 4.13.

It should be pointed out that the tuberculosis rate for "Accredited " milk given above is apt to be rather misleading. It does not represent truly the amount of tubercle bacilli found in this grade of milk inasmuch as a large quantity of milk from "Accredited" herds is sold as ordinary ungraded milk and is, therefore, included in the "Ungraded Milk" figure.

TUBERCULOSIS.

By Dr. D. P. SUTHERLAND, Senior Tuberculosis Officer.

In the Annual Reports for 1935 and 1936 the general trend of the death-rate from all diseases had shown an increase, and this also applied to all respiratory diseases, excluding tuberculosis.

For the year 1937 there has been a further slight increase in these figures for the general rate and included in them we find a small rise in those due to tuberculosis. Before dealing with these in detail some general observations may be of interest.

Last year special attention was directed to the continuing diminution in the relative number of notified cases of pulmonary tuberculosis. The importance of early recognition of the disease was stressed, and some reference to the delays in notification was made. Emphasis was laid upon the work done in trying to secure knowledge of existing cases and the efforts made to secure the examination of as many suspects as possible.

It is to be realised that there still remains not only a reservoir of quiescent and sometimes positive cases, but also a certain number of cases in ill-health, who may not have secured adequate examination and treatment for one reason or another. In addition to this, as was pointed out in the report for 1935, the continuing decline in the number of notified cases was abnormal in relation to the mortality curve. It was then stated that this irregular wave would probably be corrected in the next two years, and we now see this happening, and, as a result, find that in 1937 a greater number of cases have been notified than in the preceding year. It is probable therefore that the present figures, when placed in their proper place on the notification scale, represent a more accurate trend in the curve and help to resolve it towards its truer shape. In association with this increase in the notifications we also find an increase in the death rate, but to a much less marked degree.

It is to be noted that, as explained in the Medical Officer's Report of 1936, deaths for a period of 53 weeks were included in the returns for that year. Accordingly a compensated population figure was calculated and used in arriving at the mortality rates. Reference to the figures for population and number of deaths will show that the apparent rise in the mortality rates is due almost entirely to the revised estimate of the population. Bearing the foregoing in mind, we may consider the figures more fully.

Notification.

The notification rate for all forms of tuberculosis in 1937 is 1·90 per 1,000 population, an increase of ·25 upon the figure for 1936. The pulmonary rate has increased by ·14 and the non-pulmonary by ·11.

Pulmonary Tuberculosis.

As is to be expected from the decline which occurred in 1936 amongst males, we find now that the usual compensating increase has fallen entirely upon them.

The highest proportion of this increase, relative to the number notified amongst the males, has occurred in the ages 45 years and upwards. The female notifications which did not decline last year have now commenced to show a slight fall. The total diminution is four, and the only note necessary is to refer to the fact that there were three fewer notifications in the age-group 15—24 years. In spite of a tendency towards a decline in the notification amongst the general female population it has been found in many parts of the country that the incidence of pulmonary tuberculosis amongst young women between these ages has remained high.

It is to be expected that as notification progressively improves in accuracy the numbers should increase, as there are undoubtedly still a number of persons, especially in the later age-groups, who are suffering from tuberculosis which goes for a long time unrecognised. These cases are a potential source of unwitting infection to their families and the general community.

Non-Pulmonary Tuberculosis.

This shows an increase in notification throughout practically all groups and in both sexes. There is no particular type of surgical tubercle predominating, and the ages affected in greatest proportion are between 15 and 44 years.

Mortality.

The death-rate this year for all forms of tuberculosis is 1·04 per 1,000, being made up of ·88 for pulmonary tuberculosis, and ·16 for the non-pulmonary form.

Pulmonary Tuberculosis.

The male death-rate, abnormally low in 1936, is now in process of correction and shows a slight increase of ·01 per 1,000.

The only group calling for any comment is at ages 65 and upwards, which showed the greatest increase.

The actual number of male cases dying from pulmonary tuberculosis was five less than in 1936, the death-rate figure being higher because of the altered population estimate referred to earlier.

The Female deaths totalled two less than in 1936, the ages 55 and upwards had a relative increase in their numbers over the previous year.

Non-Pulmonary Tuberculosis.

There is an increase here of .02 per 1,000, continuing the upward adjustment of the abnormal fall of 1935. The total figures are small, and no particular features emerge either in relation to age or sex.

Tubercular meningitis shows an increase of 14 cases, 9 males and 5 females, mostly in the earlier years of life.

SURVIVAL FACTORS IN PULMONARY TUBERCULOSIS.

In addition to the foregoing statement and analysis of the incidence and mortality of the disease, some notes upon the further investigation into recovery factors are of interest. These follow the lines of the preliminary report made in 1922, but deal with a much larger number of cases. In the compilation of these findings the procedure formerly adopted has been followed, and I am indebted to Dr. Lee for his help in preparing and analysing the somewhat complicated material.

The observations are made upon 256 cases of definite pulmonary infection where tubercle bacilli were demonstrated in the sputum, and in whom subsequently the disease became arrested and remained so for five or more years. The quiescent stage was first reached in the years 1919 to 1931, so that the survival periods vary from six to eighteen years. All cases meeting these somewhat stringent requirements have been included, and they represent recoveries in what are generally regarded as the more unfavourable types of case.

Of the total number, 166 are males and 90 females, giving a percentage of 65 per cent. and 35 per cent. respectively. As a basis for comparison the new cases of pulmonary tuberculosis with a positive sputum in adults seen during the past four years were taken, and gave percentages of 60 per cent. and 40 per cent., so, taken as a whole, the male positive case of pulmonary tuberculosis has a slightly better chance of survival than the female.

It is interesting to note that 83 per cent. of the 256 cases were insured patients, leaving only the small total of 42 (17 per cent.) in the uninsured group.

In the control series it is found that 32 per cent. of the new sputum positive cases are uninsured. This apparent relative lower survival rate in the uninsured is shown very definitely in the statistics from the Manchester Sanatoria. The percentage of uninsured patients, who are discharged from Sanatorium as without improvement, or as died in institution, is greater than in the insured group.

From a survey over a number of years of all new positive cases, the order of greater survival is as follows :—

1. Insured males.
2. Insured females.
3. Uninsured females.
4. Uninsured males.

Early Health.

The general health of these patients in their earlier years was found to be good in 69 per cent. of the cases. In the remainder it was considered to be unsatisfactory. Of these, some belonged to the non-robust or delicate type often incapacitated by minor ailments, and always regarded as being below par. Others had chronic disease, such as bronchitis, and in a further group the general health had become impaired after some such serious illness as pneumonia.

The females showed a greater number of cases with unsatisfactory early health, and out of their respective totals the relative percentages in males and females were 28% and 38%.

As a control, 100 consecutive male positive cases and 100 similar female cases, all of whom eventually succumbed to the disease, were taken. The percentage who could be regarded as having a previously satisfactory health record was 58%, but it is interesting to note that the females predominated.

Particular attention was paid to the history of chest diseases, the results, given as percentages, being tabulated below :—

	MALES		FEMALES	
	Survivors (166 Cases)	Control (100 Cases)	Survivors (90 Cases)	Control (100 Cases)
	Per cent.	Per cent.	Per cent.	Per cent.
Bronchitis	10	23	18	12
Pneumonia	14	18	7	11
Pleurisy	8	10	2	7

It is obvious that the survivors present a better general health and chest record than the others, and this leads one to presume that their general resistance, and perhaps local resistance, was higher. Whether this bears any relationship to specific resistance against tuberculosis is difficult to say.

Some comment is necessary on the high percentage of cases of bronchitis amongst the female survivors. The history given was usually one of bronchitis in childhood, or an occasional attack of acute bronchitis. In the males, on the other hand, it was mainly chronic disease in adult years.

Pleurisy is said to have occurred during early life in 10 cases. It should be noted that there is no record of an effusion amongst any of these cases.

LENGTH OF ILLNESS PRIOR TO NOTIFICATION.

DURATION IN MONTHS		0—6	7—12	13—24	25 +
Number of Patient	MALES (166) . . .	98	31	25	12
	FEMALES (90) . . .	63	21	6	—

The duration of illness prior to notification was two years or less in the majority of instances, the largest group, comprising 63 per cent. of the total cases, being notified in the first six months.

The history of length of illness in the males averaged 9 months, whilst in the females it was approximately 6½ months. Fifty-nine per cent. of the males were diagnosed in the first six months of illness, against 70 per cent. in the females.

It is again interesting to note that in both sexes the uninsured patients gave the longer histories ; in the males this amounted to two months more than the average.

Early Symptoms.

There does not appear to be anything unusual in the early symptomatology of these cases. Cough was the most constant early symptom, followed by wasting and tiredness, which was noted more frequently amongst the females than the males,

Hæmoptysis occurred in 40 per cent. of the cases, and in nearly one-third of these it was classified as copious. It appeared early in the disease, and in many instances was the first indication of any serious chest trouble. One cannot therefore regard hæmorrhage of itself, when present as an early symptom, of grave prognostic significance. The potential danger of an acute extension of the disease, or widespread dissemination following hæmoptysis, must not however be overlooked.

Pleurisy was infrequent. Out of the full total of cases it was recorded in 31 instances, and only 8 of these had an effusion. Clinical experience bears out the seriousness with which pleurisy with effusion should be regarded in cases of pulmonary tuberculosis. Often it is the only apparent clinical manifestation of underlying disease of the lung. Recovery may appear to take place early, but subsequent follow-up often reveals lung involvement or an extension to joints, bones, and other organs, generally within one to three years. Tubercular meningitis has also been a not infrequent sequel. Adequate treatment and careful observation should be instituted at once in all cases of pleurisy with effusion. In some instances a definite casual factor, such as pneumonia, cardiac disease, malignancy, etc., may be found. In the absence of some such ætiological factor tubercular infection is always to be suspected, and prolonged sanatorium care is essential.

LOCALISATION OF LESIONS.

The following table shows the distribution of lesions in percentage of total cases and of each sex:—

Localisation	Right Upper Lobe	Left Upper Lobe	Right Upper Lobe and Left Upper Lobe	Other
	Per cent.	Per cent.	Per cent.	Per cent.
Males (166)	43	11	35	11
Females (90)	30	16	37	17
Total Cases (256) ..	38	13	36	13

The group classified as "others" contains 35 cases with a variety of lesions. In 5 the only clinical signs were those of pleural effusion, whilst in the remainder at least two lobes were affected. In 23 of these (equivalent to 9 per cent. of the total) the right upper lobe was one of the lobes involved.

In the 1922 investigation the preponderance of apical, or upper lobe lesions, particularly on the right side, was noted and commented upon. It was pointed out then that in considering these cases which proceed to arrested disease, the association between resistance and site of infection appeared to be beyond reasonable doubt. Furthermore, the slight impairment of percussion note and increased conduction of breath sounds, often found at the right apex in routine examination, should be regarded suspiciously as a legacy of previous apical tuberculosis which may have passed unrecognised in its active phase.

The above statistics emphasise the previous findings and call for very little further explanation.

In 87 per cent. of the cases the lesion was confined to the upper lobes and in 83 per cent. there was right apical involvement.

Type of Lesion found Clinically.

On physical examination, when the cases were first diagnosed, moist sounds were audible in 60 per cent. of the total. It must be remembered that every case presented sputum, which was examined and found to contain tubercle bacilli, and obviously there must have been breaking-down of tissue. In many instances we can presume that this was minimal, as judged by the subsequent satisfactory progress of the cases. In the others it is suggested that the lesion was centrally placed, and no crepitations were identified on ordinary stethoscopic examination. Undoubtedly many of the cases were diagnosed on a suspicious history and positive sputum test, the physical signs being slight and by no means pathognomonic. It is, therefore, obvious that no investigation of a chest case is complete unless sputum examinations are made, in spite of the fact that abnormal signs may not have been found in the lungs. The trivial amount of sputum that is often mentioned in case histories should not be neglected.

It is of interest that in 37 (approximately 13 per cent.) of the cases there was clinical evidence of cavitation. This survey covers a good many years, when very few radiological examinations were made, but I have no doubt that if X-ray information had been available many more cavities would have been recorded. In only two cases was artificial pneumothorax treatment used, and in the remainder spontaneous healing occurred under ordinary sanatorium treatment.

In regard to the presence of cavities it is noteworthy that, in the statistics of the Trudeau Sanatorium, where some of the most careful observations are recorded, we find the following remark:—

“Only in 15 per cent. of cases showing X-ray evidence of cavity were clinical signs to be made out.”

Other writers give the figure at 33 per cent. to 45 per cent. Our results, therefore, of 13 per cent. cavities amongst survivors, may underestimate considerably the number who might have shown signs of cavity with present-day radiological facilities, including the tomograph.

The further quotation from the same report, namely :—

“ Cavities disappear in 40 per cent. of cases treated up to $1\frac{1}{2}$ years without surgery ”

is in general accord with our experience.

Complications and Associated Conditions.

These were investigated, but throw no light on the subject under consideration.

Bronchitis, emphysema, or a combination of the two, was present in 22 cases, and can be regarded as a liability to a lung which is already under the strain of combating infection with tubercle.

The complications were few, as to be expected, and are listed below :

Tuberculous cervical adenitis	.. ..	8
Tuberculous laryngitis	.. .. .	2
Tuberculous spinal caries	.. .. .	2
Tuberculous epididymitis	.. .. .	2
Fistula in-ano	.. .. .	3
Tuberculous peritonitis	.. .. .	1
Phlyctenular conjunctivitis	.. .. .	1

Family Tuberculosis.

A family history of tuberculosis (pulmonary or non-pulmonary) was found in 24·2 per cent. of these cases, but varied considerably in the two sexes. In only 19·2 per cent. of the males was such a history noted, against 33·3 per cent. in the females.

For general information a series of 1,000 consecutive cases of pulmonary tuberculosis (male and female, positive and negative), were investigated, and found to give a record of family tuberculosis in 23·8 per cent. This is hardly comparable with the special group under review ; and it was thought more desirable to investigate 100 consecutive male positive cases and a similar number of females, in which the disease proved fatal, as a truer basis for consideration. The result of this showed a much higher incidence of family infection (again more marked in the females), the percentages being 31% in the males and 39% in the females.

If the enquiry is limited to the presence only of *pulmonary* tuberculosis in other members of the family, the comparative figures, which are quite significant, are as follows :—

	Survivors	Control
	Per cent.	Per cent.
MALES	15·7	28
FEMALES	31·1	38

A more detailed study of the family history in the survivors is instructive. In nine there were two other cases of pulmonary tuberculosis in addition to the one under consideration, whilst in two instances there were respectively three and four other members with pulmonary disease.

In over one-third of the cases the source of infection was a relative known to have pulmonary tuberculosis with a positive sputum. The table below gives the percentage distribution of what may be called the sources of infection in those cases which presented a family history of pulmonary tuberculosis :—

SOURCES OF INFECTION.

Relation	Males	Females
	Per cent.	Per cent.
Father	21	20
Mother	6	7·5
Wife	6	—
Husband	—	12·5
Sister	9	27·5
Brother	33	22·5
Son	3	—
Daughter	15	7·5
Other	6	2·5

The outstanding feature of this is the frequent responsibility of brothers as the infecting agent for both brothers and sisters. Sisters apparently infect each other mainly, and are very rarely the source of fraternal disease amongst survivors. The other remarkable fact is the high incidence of paternal tuberculosis, which is three times as frequent a source as disease occurring in the mother of the patient. It is extremely doubtful if this is a true picture, as one associates with the mother of a household closer contact with other members, giving rise to the greater possibility of frequent and massive infection. This undoubtedly occurs in the younger children of the family, which is, however, outside the scope of this review. So far as the adults are concerned, it raises the question of whether in these circumstances, where the mother is the focus of infection, the disease more often proves fatal. Amongst the “survivors” they are certainly only a very small group.

Infections from male members of a family are responsible for infection of 57 per cent. of males, and 54 per cent. of females.

Infections from female members of a family are responsible for infection of 36 per cent. of males and 42 per cent. of females.

Males were, therefore, the cause of a higher percentage of infections amongst survivors than were females.

Have we any control as to what similar analysis of deaths would show? The following table deals with this:—

ANALYSIS OF 100 CONSECUTIVE MALES AND FEMALES WITH POSITIVE SPUTUM WHO DIED OF PULMONARY TUBERCULOSIS.

	Males	Females
	Per cent.	Per cent.
Family history of tuberculosis in.. .. .	28	30
Family history of pulmonary tuberculosis in	21	26

PULMONARY SOURCES.

Relation	Males	Females
	Per cent.	Per cent.
Father	16·7	27·8
Mother	10·0	5·6
Wife	23·3	—
Husband	—	8·3
Sister	23·3	36·0
Brother	10·0	16·7
Son	3·3	5·6
Daughter	10·0	—
Other	3·3	—

In considering deaths, we see that this proportion of infection as from father or mother is maintained. Forty-four per cent. of deaths are due to paternal infection, as compared with 16 per cent. due to the mother.

Infection from males is associated with a death percentage nearly twice as high in females as in males. The survival rates of similarly infected cases is about equal in the two sexes. Infection from females shows that the percentage of female deaths is as 66 to 41.

It will be noted that sisters are the chief source of infection, viz., 59 per cent.

Age at Arrest.

To realise the significance of this factor, it is necessary to take into consideration notification rates and death-rates for both sexes separately.

The age of the patient when the disease first became arrested has been taken in the cases under our consideration. The usual age-groupings have been used, showing in each the percentage of the total cases both male and female.

The notification and death-rates are compiled from statistics taken over a five-year period, and demonstrate the percentage of total notifications and deaths of adult males and females occurring in the same age-groups.

MALES.

Age-group in Years	15—24	25—34	35—44	45—54	55 +
Percentage of total male "survivors"	13.8	30.7	33.1	18.1	4.2
Percentage of total male adult notifications..	21.2	20.6	20.4	21.8	15.7
Percentage of total male adult deaths	13.6	17.4	20.9	26.2	21.8

FEMALES.

Age-group in Years	15—24	25—34	35—44	45—54	55 +
Percentage of total female survivors	17.7	42.2	21.1	15.6	3.3
Percentage of total female adult notifications..	40.3	27.1	15.5	10.5	6.4
Percentage of total female adult deaths ..	34.8	27.5	15.9	12.8	8.8

In the case of males we have a steady notification percentage in each of the decennial periods from ages 15—54.

The death percentage, on the other hand, increases regularly until in the last decennial period, namely 45—54, it is double that at 15—24.

At the same time the survivors show a small rate at 15—24, a much more favourable rate at 25—44, and a drop again at 45—54.

In females the notification percentage descends steadily from the earliest to the latest age-periods. The deaths diminish from a high figure of over twice the male percentage at 15—24 to half the male figure at 45—54. The survivors show a slightly better percentage in the 15—24 group than in the case of males, a much better figure, nearly 50 per cent. at 25—34, but this is halved in the next decennium, and at 45—54 is slightly worse than the males.

It follows, therefore, that the best chances of survival occur when arrest is established in males at 25—44, and in females at 25—34.

In spite of the notifications in females being four times the percentage at 15—24 than they are at 45—54, and the deaths in the first decennium being three times that in the last, yet the survival outlook for those arrested at 15—24 is slightly better than for those at 45—54.

With a notification and death-rate slightly over the average, *i.e.*, 27 per cent. in each case at 25—34, we find the best survival figure for arrests in this group, namely, the abnormal one of 42 per cent. This may be due to a longer period of treatment being necessary and accepted prior to arrest, and so bringing in a greater number to the later age-group, as compared either with other decennial periods or with the male cases.

End Results Clinically.

Clinical examination was made during arrest, and an attempt has been made to assess the resultant physical condition of the lungs.

In 44 per cent. of the cases no abnormality was found, and in ordinary circumstances even the possibility of previous active disease would be questioned. These results are not surprising, if what was said regarding the initial physical findings is kept in mind. Radiological examination in such cases might reveal small healed foci in many instances, but these were not apparent to percussion and auscultation.

Signs of fibrosis in varying extent and degree were found in the remaining cases. In 16 per cent. of the total it was considered to be well-marked, as compared with the slighter degrees found in the others. A definite thickened pleura was shown in only seven patients, and in two of these was associated with heavy fibrosis.

Length of Treatment to Arrest.

PERIOD in Years	Under 1	1—2	2—3	3—4	4—5	5 and over
Percentage of Males ..	1.8	11.4	17.5	15.0	12.0	41.6
Percentage of Females..	5.6	13.3	20.0	14.4	15.6	13.1

The period of treatment is calculated from the time the patient came under the notice of the Tuberculosis Authority until the disease was first regarded as arrested. This includes the time spent in sanatorium, but obviously the major portion of the treatment was carried out at home. A certain amount of caution is exercised with regard to sputum positive cases, and very often a case is not marked up as being quiescent until the observer feels more or less confident that the arrest will be permanent. This may necessitate a longer period of supervision, with an apparent increase in the total length of treatment.

From the above table it is seen that in the males a longer period of treatment was necessary before arrest was established, but to assign this to any such cause as decreased resistance, or a more virulent infection, would be mere conjecture. Economic factors and diminution of necessary continuous institutional care are more common in males, who may be, and often are, less willing to comply with a disciplined life.

The average length of treatment in the males was 3.5 years, as compared with 3.1 years in the females. This undoubtedly bears a relationship to the fact previously noted in this report, that the duration of illness in the males, prior to notification and institution of treatment for tuberculosis, is comparatively longer than in the females. This, as will be shown, is reflected in the necessity for longer sanatorium treatment in the males.

Percentage of Treatment in Sanatorium.

The percentage of the total length of treatment which was spent in institution has been calculated with the following results :—

Percentage of Total Length of Treatment	Nil	Under 10%	10—20%	20—30%	30—50%	50 + %
Percentage of males (166)	0.0	48.8	20.5	12.0	7.2	2.4
Percentage of females (90)	6.7	44.4	28.9	14.4	4.4	1.1

In both sexes it is to be noted that practically 80 per cent. of the cases had to spend 20 per cent. or less of their total period of treatment in sanatorium. As the average total period of treatment in the males was found to be longer, it follows that the actual period spent in sanatorium by the males was greater than in the females. On the basis of the 20 per cent. shown above, it can be said that the majority of the males spent anything up to $8\frac{1}{2}$ months in sanatorium, whilst in the females the similar upper limit was $7\frac{1}{2}$ months.

Civil State.

It was thought that it might be of interest to enquire into the civil state of these patients when the disease was first diagnosed. In the males 60 per cent. were married, as compared to 42 per cent. in the females.

Of these females, no less than 76 per cent. had one or more children.

HOUSING.

It is of interest to record the assistance given in rehousing families in whom tuberculosis has occurred.

A very large number of applications are received by the Tuberculosis Officer for help in securing suitable Corporation houses. These are carefully considered in relation both to the requirements of the patient in regard to adequate conditions of living, and to the danger of family infection. The greater number apply on grounds other than the above, and are referred if necessary to the appropriate department.

Out of the great volume of applications received in recent years it was considered advisable to have a detailed report made in over 1,000 cases. After very close scrutiny, 205 of these families were recommended for special consideration for Corporation tenancies, and 135 obtained them. Of the remaining 70 families, in 32 instances they were successful in obtaining other suitable alternative accommodation for themselves, and the balance of 38 families is accounted for by removals out of the Manchester area, etc.

The statistics for the year are set out in the following tables :—

TABLE I.

Rates per Thousand of the Population.

COMPARATIVE FIGURES.

	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937
DEATH RATES :—												
General	13·28	13·90	13·06	15·51	13·07	13·86	13·03	13·41	12·24	12·91	13·50	13·52
Respiratory diseases (except tuberculosis)	2·61	2·93	2·42	3·25	2·10	2·59	1·98	1·97	1·47	1·73	1·83	1·70
Tuberculosis (all forms)	1·41	1·38	1·29	1·4	1·37	1·29	1·17	1·15	1·13	1·04	1·01	1·04
Phthisis, both sexes	1·19	1·15	1·10	1·21	1·15	1·12	1·00	1·00	·97	·92	·87	·88
„ males only	1·58	1·41	1·42	1·54	1·41	1·43	1·23	1·25	1·32	1·17	1·09	1·10
„ females only	·84	·92	·80	·91	·91	·82	·79	·78	·66	·69	·67	·69
Non-pulmonary tuberculosis, both sexes	·22	·22	·19	·19	·22	·17	·16	·15	·16	·12	·14	·16
TUBERCULOSIS NOTIFICATION RATES :—												
All forms	2·44	2·53	2·51	2·28	2·23	2·32	1·93	1·80	1·79	1·69	1·65	1·90
Pulmonary only	1·84	1·88	1·87	1·79	1·64	1·67	1·41	1·40	1·39	1·30	1·26	1·40
Non-pulmonary only	·60	·65	·64	·48	·59	·65	·52	·40	·40	·40	·39	·50

TABLE 2.
NEW CASES AND DEATHS DURING 1937.

Age Periods	New Cases				Deaths			
	Pulmonary		Non-Pulmonary		Pulmonary		Non-Pulmonary	
	M.	F.	M.	F.	M.	F.	M.	F.
0	1	1	5	4	1	..	4	1
1	3	9	32	21	2	4	11	12
5	20	8	35	32	2	..	5	5
10	9	12	22	21	..	2	7	3
15	53	77	31	35	20	38	6	6
20	59	90	9	27	24	53	2	9
25	114	105	22	23	60	66	8	5
35	118	62	11	15	77	51	5	4
45	122	28	5	3	91	23	4	2
55	91	26	8	6	73	27	10	3
65 and upwards ..	34	13	4	5	41	9	4	3
Totals ..	624	431	184	192	391	273	66	53

The number of non-notified deaths from pulmonary tuberculosis was 11 = 1.65 per cent.

The number of non-notified deaths from non-pulmonary tuberculosis was 14 = 11.7 per cent. but it is to be noted that 3 of the 14 cases were certified as cases of tubercular meningitis. These cases as a rule have a very short illness, and diagnosis is frequently in doubt during life.

The percentage of non-notified deaths from all forms of tuberculosis was 3.19.

There were, in addition, 5 deaths of non-notified cases outside Manchester which were adjudged by the Registrar-General to be properly referable to this area.

TABLE 3.

PRIMARY NOTIFICATIONS AND DEATHS FROM PULMONARY TUBERCULOSIS, 1917-1937.

Age—Groups.

Pulmonary Tuberculosis	0—	1—	5—	10—	15—	20—	25—	35—	45—	55—	65—	TOTAL	
												Notifications	Deaths
Notifications, 1917—1927	63	423	1057	1108	1768	1873	3350	3372	2697	1283	496	17490	10652
Deaths, " "	40	156	110	236	1000	1105	1907	2321	2247	1092	438		
Notifications, 1928	3	16	63	66	144	158	319	258	233	149	29	1438	843
Deaths, " "	2	8	6	12	65	109	161	167	182	100	31		
Notifications 1929	1	18	38	43	146	191	294	254	235	135	30	1385	930
Deaths, " "	1	7	3	7	76	117	179	190	191	121	38		
Notifications, 1930	2	11	55	37	147	184	263	227	203	122	36	1287	903
Deaths, " "	6	2	6	9	89	110	200	150	168	129	34		
Notifications, 1931	1	10	75	63	143	191	263	209	191	113	26	1285	855
Deaths, " "	3	4	6	10	67	111	195	151	166	109	33		
Notifications, 1932	1	24	32	28	146	158	234	194	172	74	24	1087	770
Deaths, " "	2	17	2	10	52	114	151	136	167	91	28		
Notifications, 1933	3	11	17	27	125	170	253	176	188	85	26	1081	773
Deaths, " "	2	4	3	7	68	105	159	161	146	95	23		
Notifications, 1934 .. ..	..	9	19	40	127	170	228	172	164	104	40	1073	751
Deaths, " "	4	7	6	6	49	107	146	141	152	98	35		
Notifications, 1935	3	9	35	31	106	151	209	185	167	89	21	1006	711
Deaths, " "	3	2	7	4	56	93	152	122	155	81	36		
Notifications, 1936	1	6	17	34	104	167	202	174	132	106	32	975	671
Deaths, " "	1	3	5	12	59	84	129	130	120	100	28		
Notifications, 1937	2	12	28	21	130	149	219	180	150	117	47	1055	664
Deaths, " "	1	6	2	2	58	77	126	128	114	100	50		
Total notifications	80	549	1436	1498	3086	3562	5834	5401	4532	2377	807	29162	18523
Total deaths	65	216	156	315	1639	2132	3505	3797	3808	2116	774		

TABLE 4.

PRIMARY NOTIFICATIONS AND DEATHS FROM NON-PULMONARY TUBERCULOSIS, 1917-1937.

Age—Groups

Non-pulmonary Tuberculosis	0—	1—	5—	10—	15—	20—	25—	35—	45—	55—	65—	TOTAL	
												Notifications	Deaths
Notifications, 1917-1927 ..	195	1263	1397	1176	853	459	478	305	231	145	92	6594	2575
Deaths, " ..	256	755	304	282	254	156	164	135	131	80	58		
Notifications, 1928 ..	12	74	112	71	71	46	47	26	18	8	5	490	149
Deaths, " ..	11	35	19	15	14	7	19	15	4	6	4		
Notifications, 1929 ..	11	65	78	40	55	28	44	27	13	9	5	375	152
Deaths, " ..	13	31	17	10	18	17	16	10	3	11	6		
Notifications, 1930 ..	17	89	108	63	46	42	41	20	20	16	4	466	174
Deaths, " ..	10	49	20	9	23	16	13	11	14	3	6		
Notifications, 1931 ..	10	83	95	87	67	40	55	22	23	6	8	496	132
Deaths, " ..	10	43	11	9	16	2	16	9	5	6	5		
Notifications, 1932 ..	6	69	86	49	55	33	45	30	18	8	3	402	126
Deaths, " ..	7	38	20	10	12	7	10	4	8	5	5		
Notifications, 1933 ..	6	46	70	41	33	33	35	27	13	8	1	313	114
Deaths, " ..	7	26	13	6	18	7	13	11	7	3	3		
Notifications, 1934 ..	7	52	64	43	37	30	39	21	11	6	3	313	125
Deaths, " ..	9	24	15	11	14	14	15	12	6	3	2		
Notifications, 1935 ..	3	45	56	45	31	27	49	23	13	9	6	307	95
Deaths, " ..	3	18	9	6	8	12	8	14	8	8	1		
Notifications, 1936 ..	4	50	57	49	38	33	29	13	14	11	3	301	109
Deaths, " ..	7	21	15	9	14	12	8	4	10	7	2		
Notifications, 1937 ..	9	53	67	43	66	36	45	26	8	14	9	376	119
Deaths, " ..	5	23	10	10	12	11	13	9	6	13	7		
Total notifications ..	280	1889	2190	1707	1352	807	907	540	382	240	139	10433	3870
Total deaths ..	338	1063	453	377	403	261	295	234	202	145	99		

TABLE 5.

PRIMARY NOTIFICATIONS OF PULMONARY AND NON-PULMONARY
TUBERCULOSIS RECEIVED FROM MUNICIPAL WARDS DURING 1937.

Wards	Pulmonary	Non- Pulmonary	Totals
1. Exchange.. .. .	1	—	1
2. New Cross	68	25	93
3. St. Clement's	1	1	2
4. Oxford	5	—	5
5. St. John's	6	2	8
6. St. Ann's	1	—	1
7. St. Michael's	26	9	35
8. Collyhurst	27	7	34
9. Cheetham	29	9	38
10. Collegiate Church	30	7	37
11. Crumpsall	27	10	37
12. Blackley	24	12	36
13. Harpurhey	32	2	34
14. Moston	25	10	35
15. Newton Heath	35	11	46
16. Miles Platting	35	15	50
17. Bradford	52	18	70
18. Beswick	36	12	48
19. Ardwick	36	12	48
20. Openshaw	30	7	37
21. St. Mark's	35	13	48
22. Longsight	24	4	28
23. All Saints'	51	13	64
24. St. Luke's	49	14	63
25. Medlock Street	27	13	40
26. St. George's	33	14	47
27. Moss Side East	22	8	30
28. Moss Side West	28	15	43
29. Chorlton-cum-Hardy	47	13	60
30. Didsbury	26	13	39
31. Withington	39	20	59
32. Gorton North	33	9	42
33. Gorton South	33	19	52
34. Levenshulme	23	8	31
35. Rusholme	23	8	31
36. Wythenshawe	36	23	59
Total—City of Manchester ..	1055	376	1,431

TABLE 6.

SOURCES OF NOTIFICATION OF TUBERCULOSIS DURING 1937.

Source	Pulmonary	Non-Pulmonary	Totals
Crumpsall Hospital	102	41	143
Withington Hospital	107	26	133
Booth Hall Hospital	24	48	72
District Medical Officers	—	1	1
Manchester Royal Infirmary ..	40	58	98
Ancoats Hospital.. .. .	34	57	91
Skin Hospital	—	13	13
St. Mary's Hospital	1	6	7
Northern Hospital	2	—	2
Jewish Hospital	5	1	6
Pendlebury Hospital	2	17	19
Babies' Hospital	1	3	4
Hulme Dispensary	1	—	1
Gartside Street Dispensary ..	1	8	9
Hardman Street Dispensary ..	16	—	16
Asylums	8	—	8
Schools	—	3	3
Tuberculosis Staff	102	24	126
Military	4	—	4
Various Sources	54	14	68
Private Practitioners	547	53	600
Child Welfare Centres	1	—	1
Swinton House	—	—	—
Ear Hospital	—	—	—
Eye Hospital	—	—	—
Monsall Hospital	3	3	6
Total	1 55	376	1,431

180 tenants have allowed the removal of bedding, etc., for disinfection or destruction.

92,628 cardboard boxes have been prepared in the office and supplied to patients for use as sputum boxes in the home.

548 sputum bottles have been supplied for use outside the house.

14,714 visits have been made by the Enquiry Officers during the year.

50,219 letters were sent out.

731 notices warning against spitting on floors, etc., have been supplied to offices and workshops.

TABLE 7.

SOURCES OF PRIMARY NOTIFICATION OF NON-PULMONARY CASES FOR
THE YEARS 1918 TO 1937.

Source	1918- 1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937
Cumpsall Hospital	218	16	20	20	20	19	10	15	8	16	41
Withington Hospital	194	13	16	21	18	13	7	13	27	23	26
Booth Hall Hospital	478	43	28	64	63	59	35	38	21	39	48
Outside District Medical Officers	5	..	..	2	..	..	1	..	..	..	1
Royal Infirmary	937	98	60	60	92	78	59	55	77	51	58
Wacoats Hospital	500	40	22	33	34	21	18	19	16	17	57
Leikin Hospital	417	37	29	36	33	28	24	18	16	11	13
St. Mary's Hospital	126	13	6	8	10	..	1	7	9	6	6
Northern Hospital	96	9	3	2	10	11	2	3	8	12	..
Jewish Hospital	57	7	3	5	6	1	..	1	..	2	1
Pendlebury Hospital	69	12	10	30	26	15	13	12	11	13	17
Babies' Hospital	8	..	..	2	2	3	8	2	..	1	3
Mulme Dispensary	4	..	..	..	..	..	..	..	1	..	..
Gartside Street Dispensary..	449	22	21	23	15	20	9	9	5	12	8
Hardman Street Dispensary.	159	21	16	20	9	1	..	..	..	..	..
Bowdon Hospital	6	1	1	..	..	..	..	..	..	..	..
Asylums	30	..	2	2	2	..	1	..	..	..	..
Schools	218	20	4	9	23	27	24	16	5	3	3
Tuberculosis Office Staff ..	123	12	20	13	10	18	20	14	10	14	24
Military	33	..	..	..	..	1	1	1	..	1	..
Various Sources	161	22	12	25	16	16	11	16	15	14	14
Private Practitioners	1503	104	102	89	96	70	69	74	76	64	53
Child Welfare Centres.. ..	..	..	..	2	..	1	..	..	2	..	..
Ear Hospital .. .. .	..	..	..	..	..	..	..	..	..	1	..
Eye Hospital .. .. .	..	..	..	..	..	..	..	..	..	1	..
Swinton House .. .. .	..	..	..	..	11	..	..	..	..	..	..
Monsall Hospital .. .. .	..	..	..	..	..	..	..	..	..	..	3
	5791	490	375	466	496	402	313	313	307	301	376

TABLE 8.
NUMBER OF NEW CASES OF PULMONARY TUBERCULOSIS
NOTIFIED DURING THE YEARS 1900 TO 1937.

Year					Poor-law Cases	Institutions, etc.	Private Practitioners	Total
(1)	1900*	..	..	..	578	455	540	1,573
	1901	..	..	..	625	373	341	1,339
	1902	..	..	..	667	305	303	1,275
	1903	..	..	..	556	550	251	1,357
	1904	..	..	..	512	440	250	1,202
	1905	..	..	..	527	588	291	1,406
	1906	..	..	..	565	510	304	1,379
	1907	..	..	..	634	646	310	1,590
(2)	1908	..	..	..	659	498	346	1,503
	1909	..	..	..	681	542	384	1,607
	1910	..	..	..	543	760	356	1,659
(3)	1911	..	..	..	517	897	423	1,837
(4)	1912	..	..	..	488	947	969	2,404
(5)	1913	..	..	..	345	717	1,350	2,412
	1914	..	..	..	483	877	1,304	2,664
	1915	..	..	..	279	740	1,194	2,213
	1916	..	..	..	322	817	1,410	2,549
	1917	..	..	..	470	716	1,061	2,247
	1918	..	..	..	268	563	1,015	1,846
	1919	..	..	..	208	538	845	1,591
	1920	..	..	..	206	629	672	1,507
	1921	..	..	..	257	632	722	1,611
	1922	..	..	..	233	567	656	1,456
	1923	..	..	..	239	546	659	1,444
	1924	..	..	..	223	555	731	1,509
	1925	..	..	..	262	496	746	1,504
	1926	..	..	..	220	422	765	1,407
	1927	..	..	..	241	441	756	1,438
	1928	..	..	..	253	361	824	1,438
	1929	..	..	..	201	382	802	1,385
	1930	..	..	..	201	377	709	1,287
					<i>Transferred Hospitals</i>			
	1931	..	..	..	206	362	717	1,285
	1932	..	..	..	202	228	657	1,087
	1933	..	..	..	205	213	663	1,081
	1934	..	..	..	242	197	634	1,073
	1935	..	..	..	218	202	586	1,006
	1936	..	..	..	208	192	575	975
	1937	..	..	..	233	275	547	1,055
Total					13,977	19,556	25,668	59,201

* This table does not include 425 cases notified in 1899.

- (1). Voluntary notification of Pulmonary Tuberculosis—Manchester scheme.
- (2). Compulsory notification (Tuberculosis Regulations) from Poor Law institutions.
- (3). Compulsory notification from voluntary institutions.
- (4). Compulsory notification of Pulmonary Tuberculosis by all practitioners
- (5). Compulsory notification of all forms of Tuberculosis.

TABLE 9.

NUMBER OF NEW CASES OF NON-PULMONARY TUBERCULOSIS
NOTIFIED DURING THE YEARS 1913-1937.

Year					Total		Total
					Males	Females	
1913	..	..	..	..	759	714	1,473
1914	..	..	..	..	519	413	932
1915	..	..	..	..	422	415	837
1916	..	..	..	..	418	467	885
1917	..	..	..	..	433	449	882
1918	..	..	..	..	345	353	698
1919	..	..	..	..	206	228	434
1920	..	..	..	..	280	257	537
1921	..	..	..	..	295	281	576
1922	..	..	..	..	321	284	605
1923	..	..	..	..	350	380	730
1924	..	..	..	..	316	307	623
1925	..	..	..	..	322	300	622
1926	..	..	..	..	239	224	463
1927	..	..	..	..	277	226	503
1928	..	..	..	..	214	276	490
1929	..	..	..	..	204	171	375
1930	..	..	..	..	251	215	466
1931	..	..	..	..	259	237	496
1932	..	..	..	..	201	201	402
1933	..	..	..	..	154	159	313
1934	..	..	..	..	170	143	313
1935	..	..	..	..	146	161	307
1936	..	..	..	..	154	147	301
1937	..	..	..	..	184	192	376
Total.. ..					7,439	7,200	14,639

TABLE 10.
TUBERCULOSIS (NON-PULMONARY).—PRIMARY CASES NOTIFIED DURING 1937.—AGE GROUPS AND SITE.

Location of Disease	AGE GROUPS																		Totals			
	0—		5—		10—		15—		20—		25—		35—		45—		55—				65—	
	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females		
Brain:—Tumour	11	10	5	4	5	1	2	4	5	2	2	2	2	2	2	2	2	2	2	2	25	26
Meninges .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Hydrocephalus .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Glands:—Cervical	11	5	14	12	9	10	9	14	2	8	4	7	1	8	1	2	1	2	2	2	51	68
Mesenteric	1	..	2	2	..	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	4	3
Axillary .. .. .	..	1	..	1	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	1	2
Inguinal	1	..	3	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5	3
Tuberculous Peritonitis	1	..	3	4	2	1	3	4	1	2	..	3	..	..	..	2	..	..	..	..	10	16
Tuberculosis of Abdomen	3	2	3	1	..	2	1	6	1	5	..	..	..	1	..	..	..	..	..	..	8	17
of Breast .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
of Intestines .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Joints:—Spine	1	1	3	1	1	1	3	2	1	2	3	3	3	2	..	..	2	1	..	1	11	14
Hip	2	1	..	4	..	4	1	..	3	..	1	..	..	..	..	..	..	..	..	..	14	12
Elbow .. .. .	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	2
Ankle	1	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	2
Wrist	1	..	..	..	..	..	1	1	..	..	..	..	..	..	1	..	..	..	..	..	3	..
Shoulder .. .. .	..	1	1	..	1	..	3	1	..	..	..	..	..	..	1	..	..	..	..	..	3	1
Knee	1	1	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	8	2
Bones:—Various	1	2	..	..	1	..	3	1	..	..	..	..	1	..	1	..	..	..	..	..	7	4
Tuberculosis of Skin	1	..	1	..	..	..	1	1	..	1	4	1	..	..	2	2	..	1	..	1	9	6
General Tuberculosis	1	..	..	..	..	..	..	..	..	..	..	1	1	1	..	..	..	..	1	..	3	2
Special Organs:—Ear .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bladder, etc. .. .. .	..	..	..	..	..	..	..	1	..	1	2	1	1	..	1	..	..	..	..	..	1	3
Kidney .. .. .	..	..	..	..	..	..	2	..	1	..	3	..	..	..	..	..	..	..	1	..	3	..
Testicle, etc. .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	9	..
Muscles, etc. .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Rectum .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Unclassified .. .. .	..	2	..	..	..	..	1	..	..	1	2	2	..	1	..	..	1	..	1	1	5	7
Totals	37	25	35	32	22	21	31	35	9	27	22	23	11	15	5	3	8	6	4	5	184	192

TABLE II.—VARIOUS STATISTICS RELATING TO THE NOTIFICATION OF TUBERCULOSIS.

	1937	1936	1935	1934	1933	1932	1931	1930	1929	1928	1927	1926	1925	1924	1914 to 1923	1899 Sept. 1st to 1913 Dec. 31st	Total
Cases Visited and Registered—																	
Males	818	703	738	836	804	828	975	1014	1058	1106	1173	1100	1232	1204	16152	14170	43911
Females	630	586	584	598	622	723	806	806	809	919	866	872	937	1032	12167	8854	31811
Totals	1448	1289	1322	1434	1426	1551	1781	1820	1867	2025	2039	1972	2169	2236	28319	23024	75722
Houses Disinfected—																	
1. By Corporation—																	
(a) With solution of chlorinated lime only .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	15582	9015	24597
(b) With lime solution only .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	126	126
(c) By Esmarch's method and solution of chlorinated lime	2180	2361	2608	2866	2952	2991	3224	3115	2934	2693	2083	1635	1332	1571	9740	17232	29875
(d) † By fumigating lamp .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	31770
Totals	2180	2361	2608	2866	2952	2991	3224	3115	2934	2693	2083	1635	1460	1571	25322	26373	86368
2. By Tenants—																	
Esmarch's method of chlorinated lime, etc.	4583	4864	5108	5614	5791	5802	6342	7032	7192	6868	7338	6967	6392	5647	45467	36919	167926
Totals	6763	7225	7716	8480	8743	8793	9566	10147	10126	9561	9421	8602	7852	7218	70789	63292	254294
Specimens of Sputum examined—																	
Positive	683	769	846	1002	966	449	408	360	392	360	348	347	325	391	5782	6705	20333
Negative	4060	4202	4809	4957	4734	3589	2236	2039	1698	1548	1573	1363	1415	1419	16472	12176	68290
Totals	4743	4971	5655	5959	5700	4238	2644	2399	2090	1908	1921	1710	1740	1810	22254	18881	88623
Cases admitted to Hospital and Sanatoria	2246	2239	2347	2368	2275	2038	2275	2033	1919	1948	2062	1844	2027	2077	21551	22669	73918
Notified from Common Lodging houses	27	36	24	28	43	44	45	62	71	62	56	53	76	65	1388	3109	5189
Number of cases under observation ..	7558	7951	8271	8650	9017	9441	9759	10060	10197	10494	10586	10680	10379	9949	74100	33702 approx.	..

† Method commenced on 1st December, 1925.

TABLE 12.—RETURN SHOWING THE WORK OF THE CLINIC DURING THE YEAR 1937.

Diagnosis	Pulmonary				Non-Pulmonary				Total				Grand Total	
	Adults		Children		Adults		Children		Adults		Children			
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.		
A.—New cases examined during the year (excluding contacts)—														
(a) Definitely tuberculous	496	303	11	19	66	78	55	46	562	381	66	65	1074	
(b) Diagnosis not completed	..	..	..	..	..	..	..	..	46	44	7	6	103
(c) Non-tuberculous	..	..	..	..	..	..	..	..	409	414	86	74	983
B.—Contacts examined during the year—														
(a) Definitely tuberculous	27	33	8	9	3	5	3	3	30	38	11	12	91	
(b) Diagnosis not completed	..	..	..	..	..	..	..	..	5	8	6	13	32
(c) Non-tuberculous	..	..	..	..	..	..	..	..	180	426	465	485	1556
C.—Cases written off the Dispensary Register as—														
(a) Recovered	109	83	30	30	34	38	42	27	143	121	72	57	393	
(b) Non-tuberculous	..	..	..	..	..	..	..	..	646	907	575	582	2710
D.—Number of persons on Dispensary Register on December 31st—														
(a) Definitely tuberculous	1997	1522	230	212	344	448	443	344	2341	1970	673	556	5540	
(b) Diagnosis not completed	..	..	..	..	..	..	..	..	51	52	13	19	135

Total number of cases of Tuberculosis who received Treatment from the Clinic 589

Total number of attendances at the Clinic 19,906

TABLE 13.
INSURED CASES APPLYING FOR TREATMENT FOR THE YEARS 1914-1937.

	Males	Females	Total
1914	730	321	1,051
1915	572	315	887
1916	747	316	1,063
1917	728	359	1,087
1918	642	261	903
1919	630	255	885
1920	645	250	895
1921	615	255	870
1922	543	265	808
1923	539	291	830
1924	597	371	968
1925	610	327	937
1926	562	368	930
1927	555	296	851
1928	612	372	984
1929	610	376	986
1930	551	352	903
1931	555	360	915
1932	451	323	774
1933	503	281	784
1934	471	284	755
1935	428	283	711
1936	483	312	795
1937	507	345	852

Cases of discharged soldiers referred for treatment—166.

Number of patients who had so far recovered that no signs of active disease were found: Insured—293; Uninsured—309.

Grants of food were made in 3,160 instances to 498 families, and 11 grants of clothing were supplied to 11 patients in hospital and sanatoria to enable them to derive full benefit from treatment.

Special visits to the number of 15,332 have been paid by the Tuberculosis Nurses and 443 visits by the Clinical Nurse who attends to domiciliary patients requiring surgical dressings and nursing care.

TABLE 14.—INSURED CASES TREATED IN 1937.

Residential	1,683
Tuberculosis Clinic	65
Domiciliary	2,063
Total	<u>3,811</u>

ANALYSIS OF CASES TREATED.

TABLE 15.—*Residential (Insured).*

INSTITUTION	Total Cases Treated		Discharged from Institutions		Died	* Residential Treatment discontinued in other cases	Still under Residential Treatment on 1st Jan., 1938
	Males	Females	Improved	Without Improvement			
	(1)		(2)	(3)	(4)	(5)	(6)
PULMONARY							
Baguley	452	223	133 52	83 38	55 32	15 6	166 95
Crossley	64	127	36 61	5 18	.. 1	.. 3	23 44
Abergele	64	12	20 4	2 1	4 ..	2 ..	36 7
Barrowmore	48	..	24 ..	4 ..	1 ..	.. ..	19 ..
Withington	355	152	167 64	46 26	87 40	.. 6	55 16
Crumpsall	46	12	38 1	1 8	7 2	.. ..	.. 1
Manchester Royal Infirmary ..	3	2	1 1	.. ..	2 ..	.. ..	.. 1
Total Pulmonary	1032	528	602	232	231	32	463
NON-PULMONARY							
Manchester Royal Infirmary ..	10	8	10 8	....	....	....	....
Skin Hospital	2	1	2 1	....	....	....	....
Ancoats Hospital	4	4	3 4	.. ..	.. ..	.. ..	1 ..
Shropshire Orthopædic Hospital	14	12	7 6	.. 1	1 ..	.. 2	6 3
Withington	18	20	8 13	3 ..	4 3	.. ..	3 4
Crumpsall	15	15	10 7	1 2	3 4	.. ..	1 2
Total Non-pulmonary ..	63	60	79	7	15	2	20
TOTAL—ALL FORMS	1095	588	681	239	246	34	483

* The figures in column (5) relate to cases as to the progress of which no definite report is available for various reasons—*e.g.*, the withdrawal from the Institution of the insured persons themselves before the expiration of the period for which they were nominated for the treatment.

TABLE 16.—Residential (Uninsured).

INSTITUTION	Total Cases Treated			Discharged from Institutions		Died	* Residential Treatment discontinued in other cases	Still under Residential Treatment on 1st Jan., 1938
	Males	Females	Children	Improved	Without Improvement			
	(1)			(2)	(3)	(4)	(5)	(6)
PULMONARY								
Baguley	89	82	..	26 30 ..	17 10 ..	10 9 ..	4 2 ..	32 31 ..
Crossley	12	41	..	8 17 ..	2 8 ..	.. .. ..	.. 1 ..	2 15 ..
Abergele	13	11	112	5 8 28	1 .. 2	2 .. 4	.. .. 1	5 3 77
Barrowmore	10	..	..	4	1 .. ..	.. .. ..	.. .. ..	5
Withington	271	215	..	104 91 ..	36 32 ..	77 57 ..	.. 5 ..	54 30 ..
Booth Hall .. .. .	..	..	60	.. .. 24	.. .. 2	.. .. 8	.. .. 20	.. .. 6
Crumpsall	56	22	..	48 4 ..	.. 15 ..	8 3..	......	......
Manchester Royal Infirmary	1	..	..	1....	......	......	......	......
Total Pulmonary	452	371	172	398	126	178	33	260
NON-PULMONARY								
Abergele .. .. .	..	..	173	.. .. 47	.. .. 5	.. .. 3	.. .. 1	.. .. 117
Manchester Royal Infirmary	2	3	4	2 3 4	......	......	......	......
Skin Hospital	1	2	1	1 2 1	......	......	......	......
Ancoats Hospital ..	1	1	..	1 1..	......	......	......	......
Shropshire Orthopaedic Hospital	2	4	..	2 3 ..	.. .. ..	.. .. ..	.. .. ..	.. 1 ..
Withington	9	19	..	8 9 ..	.. 6 ..	.. .. ..	.. .. ..	1 4 ..
Booth Hall .. .. .	..	..	76	.. .. 20	.. .. 1	.. .. 29	.. .. 20	.. .. 6
Crumpsall	9	11	..	3 3 ..	1 2 ..	3 .. ..	.. .. ..	2 6 ..
Total Non-Pulmonary	24	40	254	110	15	35	21	137
Total—ALL FORMS ..	476	411	426	508	141	213	54	397

* The figures in column (5) relate to cases of which no definite report is available for various reasons—e.g., the withdrawal from the Institution of the persons themselves before the expiration of the period for which they were nominated for the treatment.

LIGHT THERAPY.

Artificial light treatment has been continued for those cases that experience has proved benefit by this form of therapy. During the last nine years 430 cases have been under this treatment. Two forms of artificial sunlight are made use of, viz., the mercury vapour lamp, which was in use up to the time we moved into the new clinic, and the open arc lamp.

The following table analyses these cases in detail and shows a gain in weight and improvement in many patients. Quiescence was secured in a number of those who completed the necessary course of treatment. It is to be noted that those particularly benefitting are the sufferers from tuberculous adenitis (with or without abscess formation), and those in whom abdominal tuberculosis existed. It must be borne in mind that no figures of the treatment of lupus appear, as these cases are treated by the Manchester Skin Hospital (on behalf of the Corporation) by light therapy, and in the majority of instances with very marked benefit :—

TABLE 17.

Localisation of the Disease	No. of Cases	Sex		Conditions of Cases at the end of Treatment				Weight Record			Average duration of Treat- ment in Months	Treat- ment discon- tinued	Cases still under Treat- ment and not included in this table
		M.	F.	Quies- cent	Im- proved	Station- ary	Worse	Gain	Station- ary	Loss			
Tuberculous adenitis with abscess	53	25	28	22	7	3	..	25	5	2	10.2	21	7
Tuberculous adenitis without softening ..	268	123	145	104	42	13	5	120	21	23	10.9	104	21.
Tuberculosis of bones, joints, and spine ..	20	14	6	6	3	2	..	9	..	2	12.43	9	2
Tuberculosis of abdomen and tabes mesenterica	38	16	22	14	8	4	..	20	2	4	9.64	12	2
Tuberculosis of bronchial glands	4	4	..	..	2	..	1	3	..	..	7.0	1	..
Tuberculosis of skin ..	6	2	4	..	1	..	..	..	1	..	4.0	5	..
Tuberculosis of kidney ..	5	2	3	..	1	1	..	1	..	1	12.0	3	..
Pre-tuberculous conditions	4	3	1	..	3	..	..	3	..	..	9.0		..

The following table summarises the non-pulmonary cases treated at various Institutions :—

TABLE 18.

Tuberculosis of :—

Bones and Joints	.. .. .	234
Glands	.. .. .	87
Genito Urinary Tract	.. .. .	17
Abdomen	.. .. .	51
Skin—		
1. Lupus Vulgaris..	.. .. .	116
2. Toxi Tuberculids	.. .. .	1
3. Bazins Disease ..	.. .. .	8
4. Tuberculous Ulceration of Skin	.. .. .	17

TABLE 19.

TABLES SHOWING AFTER HISTORY OF QUIESCENT AND ARRESTED CASES (INSURED).
1927.

No Tubercle Bacilli found.

Tubercle Bacilli found.

Stage	Sex	Number of Cases marked off as Quiescent	Number known to be still living at end of 1937	Lost sight of	Died	Sex	Number of Cases marked off as Quiescent	Number known to be still living at end of 1937	Lost sight of	Died
I.	M	23	9	11	3	M	6	2	3	1
	F	26	10	13	3	F	1	..	..	1
I.	M	13	6	3	4	M	14	7	6	1
	F	7	3	3	1	F	5	1	2	2
I.	M	6	3	2	1	M	3	2	1	..
	F	1	1	..	..	F	1	..	1	..
	M & F	76	32	32	12	M & F	30	12	13	5

TABLES SHOWING AFTER HISTORY OF QUIESCENT AND
ARRESTED CASES (INSURED)—continued
1928.

No Tubercle Bacilli found.						Tubercle Bacilli found.				
Stage	Sex	Number of cases marked off as Quiescent	Number known to be still living at end of 1937	Lost sight of	Died	Sex	Number of Cases marked off as Quiescent	Number known to be still living at end of 1937	Lost sight of	Died
I.	M	34	17	12	5	M	10	5	2	3
	F	28	16	11	1	F	6	3	2	1
II.	M	27	12	10	5	M	7	3	2	2
	F	15	4	9	2	F	2	1	..	1
III.	M	12	10	2	..	M	3	1	1	1
	F	3	1	1	1	F	3	2	..	1
	M & F	119	60	45	14	M & F	31	15	7	9

1929.

I.	M	34	16	13	5	M	8	5	..	3
	F	37	16	17	4	F	4	4	..	..
II.	M	24	14	5	5	M	9	3	3	3
	F	13	8	4	1	F	5	4	1	..
III.	M	9	6	2	1	M	5	1	2	2
	F	4	3	..	1	F	..	..	..	..
	M & F	121	63	41	17	M & F	31	17	6	8

1930.

I.	M	81	44	20	17	M	24	16	3	5
	F	44	22	19	3	F	4	2	2	..
II.	M	44	25	7	12	M	24	10	4	10
	F	21	13	8	..	F	14	9	2	3
III.	M	15	7	2	6	M	4	3	1	..
	F	7	6	..	1	F	2	..	1	1
	M & F	212	117	56	39	M & F	72	40	13	19

TABLES SHOWING AFTER HISTORY OF QUIESCENT AND
ARRESTED CASES (INSURED)—continued

1931.

*No Tubercle Bacilli found.**Tubercle Bacilli found.*

Sex	Number of Cases marked off as Quiescent	Number known to be still living at end of 1937	Lost sight of	Died	Sex	Number of Cases marked off as Quiescent	Number known to be still living at end of 1937	Lost sight of	Died
M	78	40	18	20	M	25	16	8	1
F	57	32	17	8	F	5	3	2	..
M	48	27	11	10	M	29	15	5	9
F	14	9	4	1	F	7	4	2	1
M	9	6	2	1	M	5	4	..	1
F	2	1	..	1	F	1	..	..	1
M & F	208	115	52	41	M & F	72	42	17	13

1932.

M	46	23	15	8	M	21	13	6	2
F	53	29	18	6	F	16	9	7	..
M	30	16	12	2	M	15	13	..	2
F	22	17	4	1	F	9	7	1	1
M	9	8	1	..	M	2	2	..	..
F	4	1	1	2	F	3	2	..	1
M & F	164	94	51	19	M & F	66	46	14	6

1933.

M	35	24	4	7	M	10	7	1	2
F	23	14	9	..	F	5	2	2	1
M	22	15	5	2	M	15	11	1	3
F	15	6	6	3	F	5	2	2	1
M	4	4	..	..	M	4	3	..	1
F	2	2	..	..	F	..	..	..	..
M & F	101	65	24	12	M & F	39	25	6	8

TABLES SHOWING AFTER HISTORY OF QUIESCENT AND
ARRESTED CASES (INSURED)—continued

1934.

No Tubercle Bacilli found.

Tubercle Bacilli found.

Stage	Sex	Number of Cases marked off as Quiescent	Number known to be still living at end of 1937	Lost sight of	Died	Sex	Number of Cases marked off as Quiescent	Number known to be still living at end of 1937	Lost sight of	Died
I.	M	35	25	9	1	M	14	12	2	..
	F	28	23	5	..	F	3	2	..	1
II.	M	14	13	1	..	M	9	7	1	1
	F	18	12	4	2	F	3	3	..	..
III.	M	..	..	..	..	M	2	2	..	..
	F	1	1	..	..	F	..	..	..	..
	M & F	96	74	19	3	M & F	31	26	3	2

1935.

I.	M	57	48	6	3	M	21	19	1	1
	F	53	45	7	1	F	13	12	1	..
II.	M	40	36	3	1	M	21	16	3	2
	F	21	16	4	1	F	8	7	1	..
III.	M	1	1	..	..	M	4	3	..	1
	F	3	3	..	..	F	3	3	..	..
	M & F	175	149	20	6	M & F	70	60	6	4

1936.

I.	M	53	50	3	..	M	27	27	..	..
	F	51	43	6	2	F	19	18	1	..
II.	M	15	14	1	..	M	29	24	3	2
	F	24	22	2	..	F	11	11	..	..
III.	M	6	6	..	..	M	8	8	..	..
	F	4	4	..	..	F	2	2	..	..
	M & F	153	139	12	2	M & F	96	90	4	2

ABERGELE, BAGULEY AND CROSSLEY SANATORIA.

Conditions relative to patients treated in the above sanatoria during the last ten years are set forth in the following tables.

It should be noted that a number of observation cases are admitted to Baguley and are sent to the other sanatoria when found suitable for this form of care. Many of the advanced cases forming so large a proportion of the Baguley admissions improve markedly under treatment and become fit for transfer later to Abergele and Delamere.

The earlier the stage of the disease at which a patient can be given sanatorium treatment the greater the prospect of permanent benefit. Properly selected cases have their best chance of arrest in the shortest time by intelligently carried-out sanatorium treatment; moreover, they learn restraint, discipline, and an ordered way of life, which are essential for maintenance of health and for prevention of relapses.

Special attention is directed to the analysis of final results for the cases treated at Abergele. These figures have now become of value as we can give the after history of patients admitted since the extension of the institution by 210 beds for children in 1931. The response to treatment has been outstandingly good in both pulmonary and non-pulmonary cases, and there is every justification for confidence that the improvement made will be permanent.

TABLE 20.
ABERGELE SANATORIUM.
Adult Males—Pulmonary.

Year	No. of new cases	Position at the end of 1937				No. of Re-admissions
		Known to be still living	Died in the Sanatorium	Died elsewhere	Lost sight of	
(1)	(2)	(3)	(4)	(5)	(6)	These are additional to the cases in Column 2 and are given to show the number of beds occupied (7)
1928 ..	83	34	1	37	11	13
1929 ..	93	32	1	43	17	25
1930 ..	66	20	..	30	16	29
1931 ..	84	33	3	33	15	18
1932 ..	68	27	1	23	17	16
1933 ..	61	31	2	16	12	18
1934 ..	54	23	3	17	11	12
1935 ..	37	28	1	2	6	16
1936 ..	40	34	3	1	2	9
1937 ..	26	25	1	..	..	12
Total ..	612	287	16	202	107	168

TABLE 20—*continued*
Adult Females—Pulmonary.

Year	No. of new cases	Position at the end of 1937				No. of Re-admissions
		Known to be still living	Died in the Sanatorium	Died elsewhere	Lost sight of	
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1928 ..	14	5	..	5	4	3
1929 ..	20	11	..	8	1	..
1930 ..	22	6	..	9	7	2
1931 ..	16	5	..	6	5	1
1932 ..	11	4	1	2	4	2
1933 ..	10	8	..	2	..	5
1934 ..	9	7	..	..	2	1
1935 ..	11	8	1	1	1	1
1936 ..	10	8	..	2	..	..
1937 ..	11	10	..	1	..	2
Total ..	134	72	2	36	24	17

ABERGELE SANATORIUM.

Child Males—Pulmonary.

Year	No. of new cases	Position at the end of 1937				No. of Re-admissions
		Known to be still living	Died in the Sanatorium	Died elsewhere	Lost sight of	
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1928 ..	..	..	..	..	..	..
1929 ..	..	..	..	..	..	..
1930 ..	..	..	..	..	..	..
1931 ..	23	17	..	3	3	..
1932 ..	20	16	..	1	3	..
1933 ..	28	23	..	..	5	..
1934 ..	16	13	..	1	2	..
1935 ..	21	17	1	..	3	1
1936 ..	16	15	..	..	1	1
1937 ..	19	19	..	..	..	3
Total ..	143	120	1	5	17	5

TABLE 20—*continued*
Child Females—Pulmonary.

Year	No. of new cases	Position at the end of 1937				No. of Re-admissions
		Known to be still living	Died in the Sanatorium	Died elsewhere	Lost sight of	These are additional to the cases in Column 2 and are given to show the number of beds occupied
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1928 ..	..	..	..	..	..	..
1929 ..	..	..	..	..	..	..
1930 ..	..	..	..	..	..	..
1931 ..	24	14	1	4	5	..
1932 ..	20	16	2	1	1	1
1933 ..	23	16	4	..	3	..
1934 ..	16	12	1	1	2	2
1935 ..	22	16	2	2	2	1
1936 ..	24	17	4	1	2	2
1937 ..	22	20	2	..	..	..
Total ..	151	111	16	9	15	6

ABERGELE SANATORIUM.

Child Males—Non-pulmonary.

Year	No. of new cases	Position at the end of 1937				No. of Re-admissions
		Known to be still living	Died in the Sanatorium	Died elsewhere	Lost sight of	These are additional to the cases in Column 2 and are given to show the number of beds occupied
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1928 ..	3	3	..	..	..	..
1929 ..	1	..	..	1	..	..
1930 ..	..	..	..	..	..	..
1931 ..	24	20	1	1	2	2
1932 ..	60	49	4	1	6	1
1933 ..	23	22	..	..	1	..
1934 ..	29	28	1	..	..	1
1935 ..	24	21	2	..	1	..
1936 ..	31	30	..	..	1	..
1937 ..	24	24	..	..	..	1
Total ..	219	197	8	3	11	5

TABLE 20—*continued.**Child Females—Non-pulmonary.*

Year	No. of new cases	Position at the end of 1937				No. of Re-admissions
		Known to be still living	Died in the Sanatorium	Died elsewhere	Lost sight of	
(1)	(2)	(3)	(4)	(5)	(6)	These are additional to the cases in Column 2 and are given to show the number of beds occupied (7)
1928 ..	1	1	..	..	..	..
1929 ..	..	..	..	..	..	..
1930 ..	1	1	..	..	..	..
1931 ..	24	21	..	1	2	..
1932 ..	36	28	2	1	5	..
1933 ..	20	17	..	2	1	..
1934 ..	15	13	..	..	2	1
1935 ..	16	15	..	1	..	1
1936 ..	28	22	1	1	4	1
1937 ..	24	23	..	..	1	..
Total ..	165	141	3	6	15	3

TABLE 21.

BAGULEY SANATORIUM.

Males.

Year (1)	No. of new cases (2)	Position at the end of 1937				No. of Re-admissions These are additional to the cases in Column 2 and are given to show the number of beds occupied (7)
		Known to be still living (3)	Died in the Sanatorium (4)	Died elsewhere (5)	Lost sight of (6)	
1928 ..	361	72	114	150	25	88
1929 ..	355	75	128	129	23	83
1930 ..	297	52	116	115	14	83
1931 ..	264	77	90	82	15	87
1932 ..	263	71	85	86	21	81
1933 ..	285	108	77	92	8	67
1934 ..	297	120	90	76	11	96
1935 ..	250	112	52	69	17	118
1936 ..	235	145	48	32	10	89
1937 ..	264	216	25	13	10	91
Total ..	2,871	1,048	825	844	154	883

Females.

Year (1)	No. of new cases (2)	Position at the end of 1937				No. of Re-admissions These are additional to the cases in Column 2 and are given to show the number of beds occupied (7)
		Known to be still living (3)	Died in the Sanatorium (4)	Died elsewhere (5)	Lost sight of (6)	
1928 ..	168	36	60	56	16	38
1929 ..	207	46	85	62	14	59
1930 ..	182	35	81	66	..	27
1931 ..	146	43	52	48	3	28
1932 ..	157	52	54	41	10	21
1933 ..	162	68	41	48	5	33
1934 ..	184	81	38	51	14	56
1935 ..	177	93	26	46	12	31
1936 ..	144	89	27	24	4	39
1937 ..	148	119	16	9	4	27
Total ..	1,675	662	480	451	82	359

TABLE 22.
CROSSLEY SANATORIUM.
Males.

Year (1)	No. of new cases (2)	Position at the end of 1937				No. of Re-admissions These are additional to the cases in Column 2 and are given to show the number of beds occupied (7)
		Known to be still living (3)	Died in the Sanatorium (4)	Died elsewhere (5)	Lost sight of (6)	
1928 ..	122	46	..	60	16	27
1929 ..	97	42	..	47	8	53
1930 ..	88	50	..	32	6	35
1931 ..	84	37	..	31	16	23
1932 ..	38	19	..	13	6	26
1933 ..	52	27	1	21	3	22
1934 ..	43	26	..	11	6	12
1935 ..	72	49	1	8	14	14
1936 ..	38	33	..	2	3	15
1937 ..	35	35	..	..	..	11
Total ..	669	364	2	225	78	238

Females.

Year (1)	No. of new cases (2)	Position at the end of 1937				No. of Re-admissions These are additional to the cases in Column 2 and are given to show the number of beds occupied (7)
		Known to be still living (3)	Died in the Sanatorium (4)	Died elsewhere (5)	Lost sight of (6)	
1928 ..	126	46	..	55	25	33
1929 ..	139	57	..	51	31	22
1930 ..	137	74	2	39	22	41
1931 ..	136	71	1	42	22	49
1932 ..	135	75	..	38	22	54
1933 ..	130	57	3	35	35	37
1934 ..	95	70	2	17	6	32
1935 ..	98	68	2	13	15	32
1936 ..	92	77	..	6	9	30
1937 ..	85	77	..	4	4	23
Total ..	1,173	672	10	300	191	353

HOSPITALS ADMINISTRATION

including :—

HOSPITALS.

INSTITUTIONS.

SPECIAL ESTABLISHMENTS.

CONVALESCENT HOMES.

DOMICILIARY MEDICAL SERVICE.

PUBLIC VACCINATION.

GENERAL HOSPITALS AND INSTITUTIONS.

General Statistics for the Year ended 31st December, 1937.

IN-PATIENTS	GENERAL HOSPITALS			SPECIAL ESTABLISHMENTS			INSTITUTIONS		TOTALS
	Crumpsall Hospital	Withington Hospital	Booth Hall Hospital	Rose Hill Convalescent Home	Langho Colony	Swinton Home	Crumpsall Institution (Mental Wards)	Withington Institution (Aged and Infirm Wards)	
1. Total number of admissions (including infants born in hospital)	15,330	14,670	6,509	529	61	37	856	455	38,447
‡ 2. Number of women confined in hospital	2,424	2,122	..	..	..	..	..	..	4,546
3. Number of live births ..	2,308	2,041	..	..	..	..	..	..	4,349
4. Number of still-births ..	128	91	.	..	..	..	..	..	219
5. Number of deaths among the newly-born (<i>i.e.</i> , under four weeks of age)*	80	69	..	..	..	..	..	..	149
6. Total number of deaths among children under one year (including those given under 5)	85	70	231	..	..	..	..	..	386
7. Number of maternal deaths among women confined in hospital	6	5	..	..	..	..	..	..	11
8. Total number of deaths ..	1,733	1,809	439	..	19	..	251	191	4,442
9. Total number of discharges (including infants born in hospital)	13,516	12,832	6,122	516	51	43	628	247	33,955
10. Duration of stay of patients included in 8 and 9 above—									
(a) Four weeks or less..	12,333	11,684	4,733	157	2	..	482	31	29,422
(b) Exceeding four but under thirteen weeks	2,462	2,423	1,520	293	8	..	180	100	6,986
(c) Exceeding thirteen weeks	454	534	308	66	60	43	217	307	1,989
11. Number of beds occupied—									
(a) Average during the year	1,214	951	470	89	636	123	679	500	4,662
(b) Highest	1,292 on 10-3-37	1,079 on 29-1-37	522 on 17-2-37	117 on 7-5-37	642 on 4-5-37	129 on 19-3-37	714 on 3-1-37	523 on 19-2-37	..
(c) Lowest	1,133 on 8-8-37	831 on 24-12-37	382 on 23-12-37	74 on 6-3-37	627 on 15-12-37	114 on 27-12-37	651 on 27-2-37	483 on 1-11-37	..
† 12. Number of surgical operations under general anæsthetic (excluding dental operations)..	1,489	1,126	2,158	..	..	..	..	..	4,773
13. Number of abdominal sections	737	736	192	..	..	..	..	..	1,665

* This figure relates only to children born in hospital.

‡ Relates to women discharged from or dying in hospital during the year.

† Including spinal anæsthesia.

DETAILS OF
BED PROVISION AND STAFFING AT GENERAL HOSPITALS
AND INSTITUTIONS, 1937.

	GENERAL HOSPITALS			SPECIAL ESTABLISHMENTS			INSTITUTIONS		TOTALS
	Crumpsall Hospital	Withington Hospital	Booth Hall Hospital	Rose Hill Convalescent Home	Langho Colony	Swinton Home	Crumpsall Institution (Mental Wards)	Withington Institution (Aged and Infirm Wards)	
1. Number of Resident Medical Staff	11	10	6	..	1	..	1	..	29
2. Number of visiting staff ..	18	23	18	1	..	1	..	..	61
3. Specialist services supplied*	{ A, B, C, D, E, F, G, H, I, J, K, M, N }			..	..	..	..	..	..
4. Number of									
(a) Trained nurses	121	140	58	4	2	3	1	5	334
(b) Probationer nurses ..	165	185	121	..	..	..	..	..	471
(c) Assistant nurses	51	12	6	9	..	..	..	..	78
(d) Male attendants	9	10	..	..	32	..	..	..	51
(e) Attendant nurses .. ..	..	..	11	4	31	..	..	60	106
(f) Superintendents .. ..	..	..	..	..	..	..	3	..	3
(g) Assistant Superintendents	..	..	..	..	..	..	4	..	4
(h) Charge attendants .. ..	..	..	..	..	..	2	9	..	11
(i) Mental nurses .. ..	..	..	..	..	..	..	56	..	56
(j) Mental attendants .. ..	..	..	..	..	..	20	44	..	64
(k) Instructresses .. ..	..	..	..	..	..	..	2	..	2
TOTALS	346	347	196	17	65	25	119	65	1,180
5. Total number of beds provided for sick and maternity cases at 31st December, 1937—									
(a) For men	640	525	..	..	303	..	356	281	2,105
(b) For women	739	659	..	..	339	..	†342	326	2,405
(c) For children (under 16 years of age), excluding cots in maternity wards†..	21	5	760	123	..	130	..	..	1,039
TOTALS	1,400	1,189	760	123	642	130	†698	607	5,549

* Specialist services supplied—
 A Surgeon
 B Physician
 C Gynæcologist and Obstetrician
 D Ophthalmic Surgeon
 E Orthopædic Surgeon
 F Aurist and Laryngologist
 G Children's Specialist
 H Pathologist
 I Dermatologist
 J Radiologist
 K Dentist
 L Tuberculosis Specialist
 M Radium Therapist
 N Anæsthetist

† The inclusion of cots in maternity wards would increase the total number of beds in Crumpsall and Withington Hospitals by 82 and 91 respectively.
 † Includes 32 beds for "sick" cases.

HOSPITALS AND INSTITUTIONS.

Introductory.

The year 1937 was not marked by any major developments in either hospital provision or administrative practice in Manchester. The year was rather one during which the ground gained during the previous two years was consolidated.

The new scheme of consultant medical and surgical services operated very satisfactorily throughout the year.

Consultation with the Manchester Joint Hospitals Advisory Board on various matters of importance to the voluntary and municipal hospital systems of the city has taken place in conformity with the constitution of the Joint Board (described in last year's report).

Once more there falls to be recorded an increase in the user by the public of the Corporation's general hospitals, an increase which, as is shown by Table I. *post*, has in seven years amounted to 30·80 per cent. During the first full year of the Corporation's administration of the former Guardians' hospitals (1931), the total number of admissions—including births—to the three general hospitals was 27,966, and for the 1937 the corresponding figure was 36,579.

The pages which follow contain a record of events which are mainly of domestic importance.

The account is not exhaustive—rather does it seek to record such changes in organisation and provision as are likely to take their place among the more permanent features of the municipal hospital system of the future. Such permanency is, however, limited to the degree of permanency which can be looked for in any progressive social service. If the needs of the service so dictate, even those things which are at present thought to be of lasting form will be subject to evolutionary changes.

One part of this report has more than a domestic significance. This is the part which sets out, in tabular form, information regarding the types of diseases and injuries treated, the age groups into which the cases fall, the distribution of the cases among the various wards of the city, and the sources of admission of the patients. The tables have now been published for four years, and soon they should supply material for a study of contemporary trends and tendencies in Manchester public hospital work. The difficulties which stand in the way of any such study being undertaken at the present time are, first, the lack of certainty that the volume of work is anywhere near stationary, and, secondly, the difficulty of separating changes due to contemporary conditions from changes due to deliberate action on the part of the administration.

Accommodation.

The accommodation provided at the general hospitals has not been increased during the year. It has actually been very slightly reduced, owing to a decision to include in all ward reconstructions one or two side wards. These side wards are provided within the same dimensional ward limits as before, and as a result beds have been lost to the main wards in most cases. This change did not actually begin in 1937; it has been operating for three or four years, but this is the first time that the reduction in bed accommodation has been recorded.

Pressure upon the accommodation in the adult general hospitals at Withington and Crumpsall continued to be high, especially during the winter months. The relief measures reported last year, *i.e.*, the transfer of two city districts from Withington to Crumpsall, and the conversion of pavilions in Withington Institution for the accommodation of 225 chronic sick patients, have been of considerable value in the avoidance of a state of actual emergency. Although the pressure is at times very great, it is not incapacitating.

A chart showing the admissions to the three general hospitals and average bed-occupancy each month over 48 months is given on page 112.

Noteworthy features of it are :—

- (1) The chart shows the “ real ” holding capacity of each hospital. “ Beds normally in commission ” is the number of beds in the hospital, excluding cots in maternity wards, wards in the hands of the workmen, wards closed for cleaning, and normal “ empties,” *e.g.*, empties by normal admission and discharge and isolation beds.
- (2) The holding capacity of Crumpsall in 1937 and of Withington in 1936 was obviously strained almost to breaking point. A margin of 20 (or 50) beds in a hospital of 1,200 or 1,400 beds is hardly a margin at all, especially when it has to be shared between male and female patients; and again between medical and surgical and other special groups of cases within each sex-classification.
- (3) The sudden influx of admissions to Crumpsall Hospital in January, 1937, bringing the occupancy up to a level which had not greatly subsided at the time of writing this report, in the early part of 1938.

- (4) The absence of pressure at Booth Hall, which, though dealing with a steadily increasing number of admissions, maintains a fairly stationary occupancy line, well within its holding capacity.

More immediately pressing needs than accommodation are the increase of resident medical staffs and of all grades of nursing staffs, and acceleration of the programme of modernisation of existing wards and departments.

General Hospitals.

During the year 1937, 36,451 patients were "dismissed" from the three general hospitals of the Corporation. ("Dismissals" are discharges and deaths combined). This exceeds by 3,357 the total "dismissals" for last year, and is the highest total recorded since the hospitals came under the Corporation's control. The following table illustrates the growth of work which has occurred :—

TABLE I.

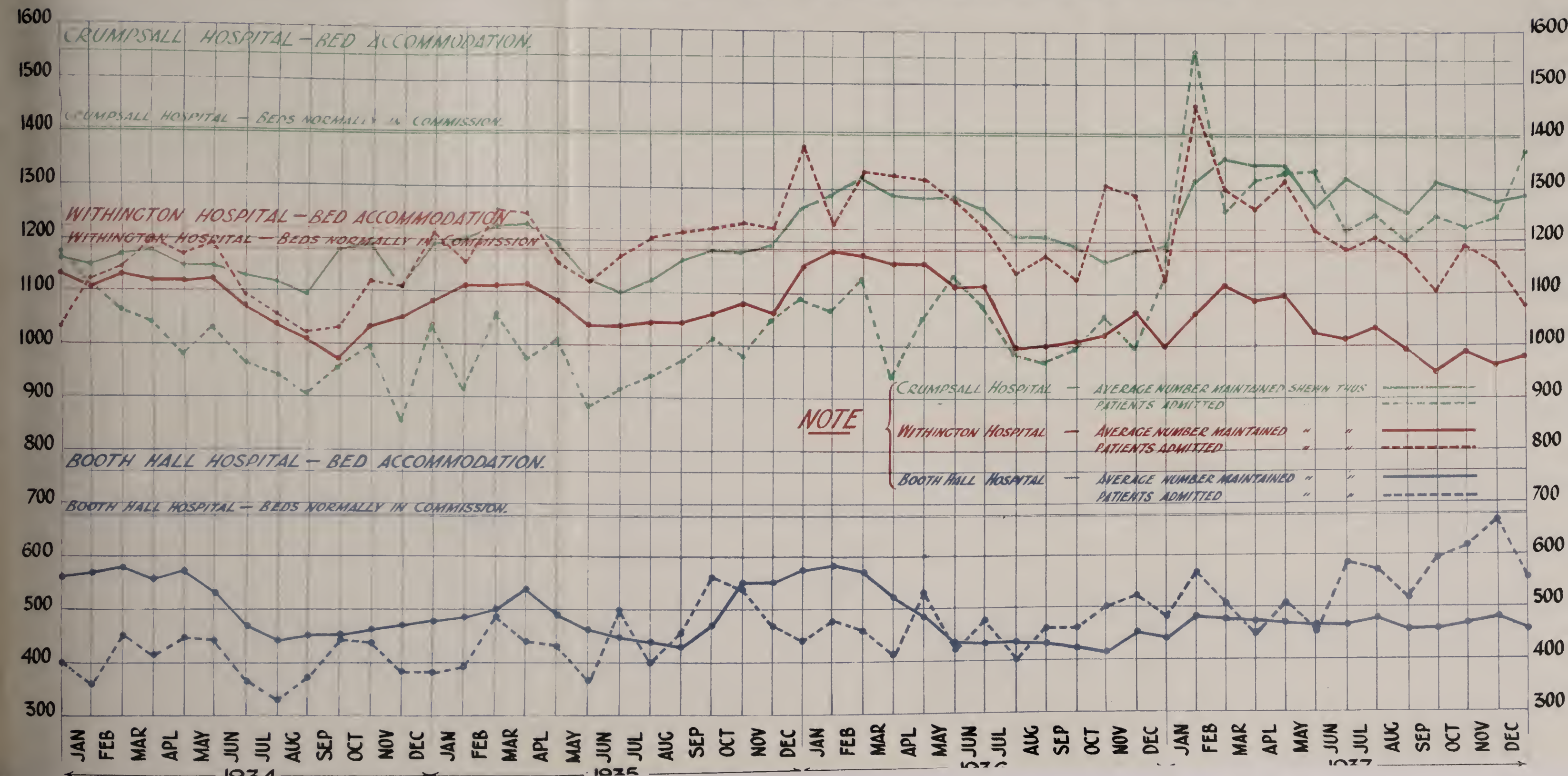
TABLE SHOWING ADMISSIONS, DISCHARGES, DEATHS, AND CONFINEMENTS
IN THE GENERAL HOSPITALS FOR THE
SEVEN YEARS 1931—1937.

Hospital	Year	Admissions	Discharges	Deaths	Women Confined in Hospital
Booth Hall	1931	4,993	4,436	487	—
	1932	5,347	4,913	492	—
	1933	4,919	4,602	342	—
	1934	4,809	4,548	331	—
	1935	5,285	4,988	374	—
	1936	5,540	5,274	400	—
	1937	6,509	6,122	439	—
Crumpsall	1931	11,003	9,863	1,123	1,676
	1932	11,474	10,479	1,136	2,038
	1933	12,040	11,140	1,229	1,794
	1934	11,731	10,514	1,055	1,863
	1935	11,671	10,158	1,251	1,845
	1936	12,551	11,117	1,389	2,115
	1937	15,330	13,516	1,733	2,424
Withington	1931	11,970	10,249	1,734	1,370
	1932	12,068	10,437	1,616	1,594
	1933	13,081	11,282	1,651	1,692
	1934	13,584	12,128	1,615	1,934
	1935	14,228	12,457	1,737	2,116
	1936	14,837	13,089	1,825	2,185
	1937	14,670	12,832	1,809	2,122
Totals	1931	27,966	24,548	3,344	3,046
	1932	28,889	25,829	3,244	3,632
	1933	30,040	27,024	3,222	3,486
	1934	30,124	27,190	3,001	3,797
	1935	31,184	27,603	3,362	3,961
	1936	32,928	29,480	3,614	4,300
	1937	36,579	32,470	3,981	4,546

CITY OF MANCHESTER

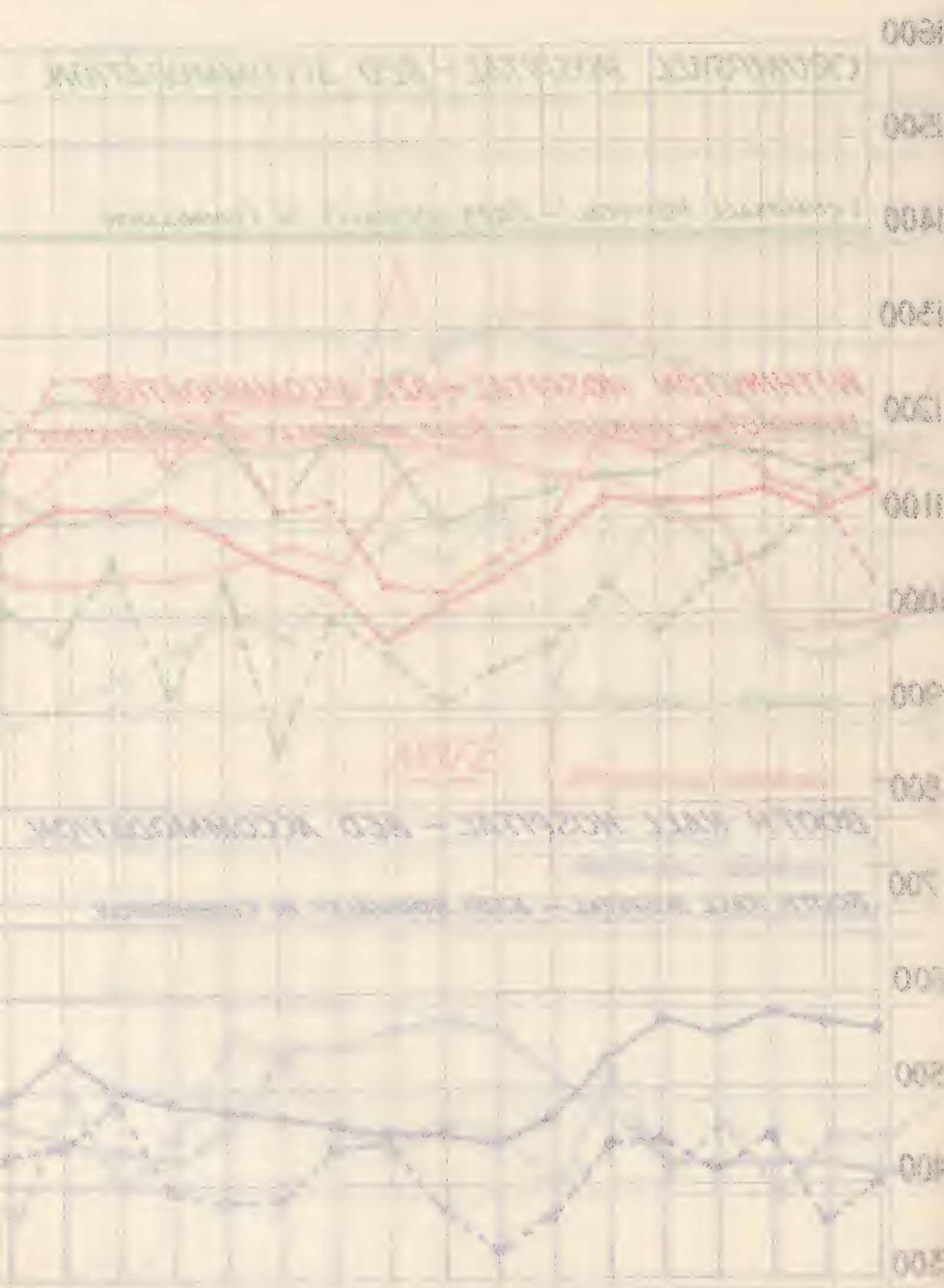
ADMISSIONS AND AVERAGE DAILY NUMBERS AT MUNICIPAL HOSPITALS EACH MONTH FROM JAN 1934 TO DEC 1937

COMPILED FROM STATISTICAL RETURNS OF HOSPITALS ADMINISTRATION SECTION



ID OF MANCHESTER VA CIVIL SERVICE COMMISSIONS NO 21 1920 ON 192

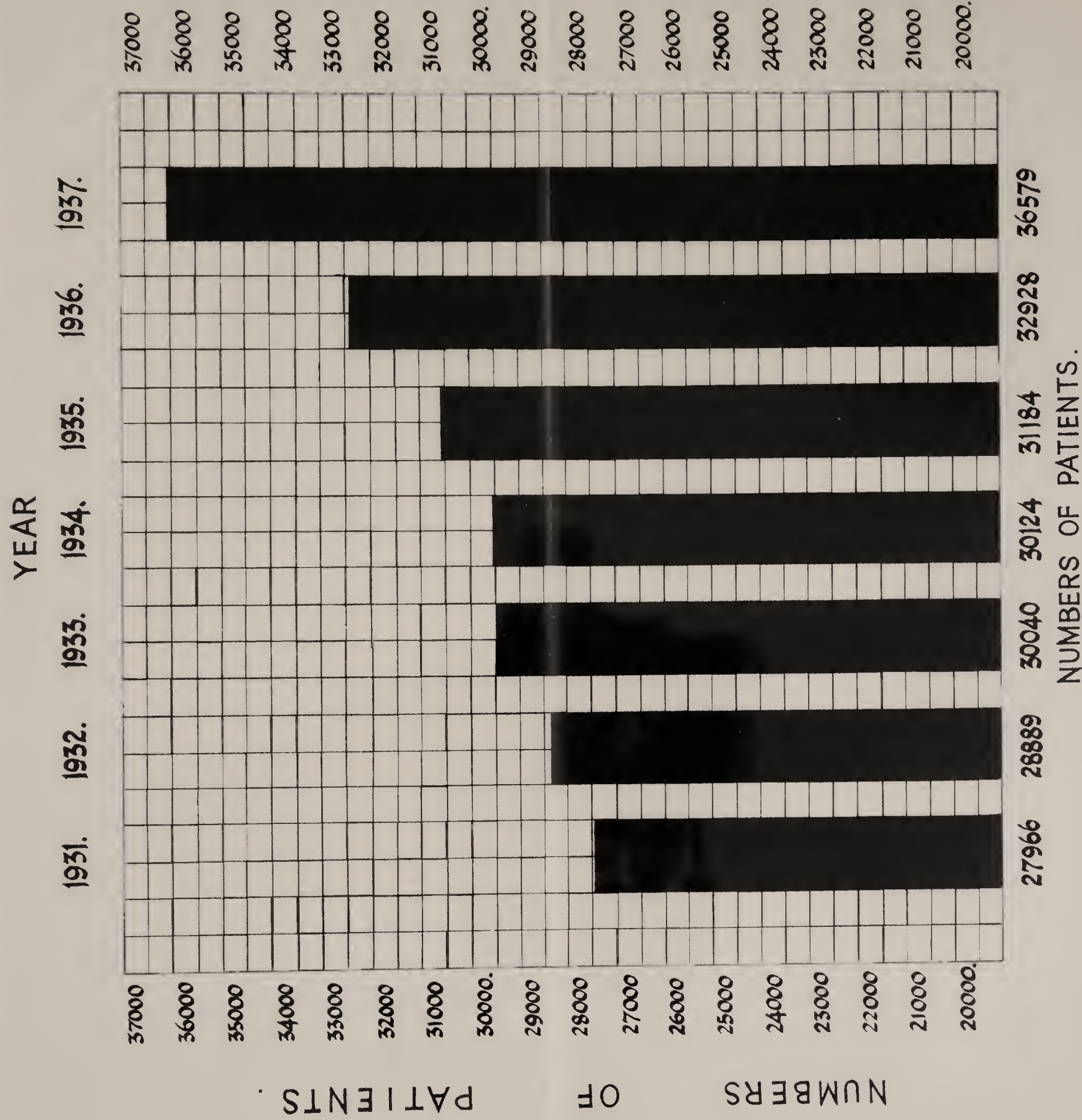
CIVIL SERVICE COMMISSIONS



CITY OF MANCHESTER

GROWTH OF WORK IN GENERAL HOSPITALS

CHART ILLUSTRATING THE NUMBERS OF PATIENTS
ADMITTED TO THE BOOTH HALL CRUMPSALL
AND WITHINGTON GENERAL HOSPITALS DURING
EACH OF THE YEARS 1931-1937 INCLUSIVE



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The chart on page 112 shows at a glance how the work of the three hospitals has advanced since 1931, and it will be noted that the measure of increase for 1937 is the greatest that has so far occurred. The increase in the number of admissions to Crumpsall Hospital is especially noteworthy. For the first time Crumpsall Hospital admitted more patients in twelve months than did Withington Hospital at the other end of the city. The reason for this sudden jump in the user of Crumpsall is not easily discernible. We had during the preceding seven years come to accept it as normal that Withington should receive more patients than Crumpsall. Withington's regular increment of numbers is obviously partly attributable to the development of the Wythenshawe Estate. The city ward tables show 1,020 Wythenshawe admissions to Withington in 1937, whereas in 1931 the Wythenshawe admissions were negligible.

There has not been any comparable housing undertaking on the north side of the city, to which can be attributed the increment in Crumpsall's numbers.

The transfer of the Openshaw and Gorton areas of the city from Withington to Crumpsall can only be made to account for an increase in Crumpsall's numbers of about 250. Maternity cases at Crumpsall (309 more confinements) account for, roughly, another 600. (Maternity cases are, of course, "double" admissions, in the sense that, generally, for each confinement there is a birth, and the child counts as an "admission" in the records.) It would appear, therefore, that as distinct from these easily-observed factors, there has been a general rise in the hospitalisation of sickness in the northern area of the city which cannot be ascribed to natural development of the area served or to any new administrative action.

Number of Confinements.

The number of confinements at Crumpsall and Withington in 1937 was 4,546 (another new high level) representing 40·5 per cent of the total births of the city.

Proportion of “ Acute ” Cases.

The proportion of “ acute ” cases (estimated as in previous reports by reference to the duration of stay in hospital) continues to grow in each hospital, as the following table shows :—

TABLE II.
“ LENGTH OF STAY ” OF PATIENTS IN MUNICIPAL GENERAL
HOSPITALS DURING THE LAST SEVEN YEARS.

YEAR	BOOTH HALL			CRUMPSALL			WITHINGTON		
	Under 4 weeks	4 to 13 weeks	Over 13 weeks	Under 4 weeks	4 to 13 weeks	Over 13 weeks	Under 4 weeks	4 to 13 weeks	Over 13 weeks
1931	2,883	1,508	532	8,020	2,305	663	8,268	2,616	1,099
1932	3,210	1,621	574	7,973	2,771	871	8,557	2,772	724
1933	3,027	1,426	491	9,658	1,855	856	9,183	2,954	796
1934	2,990	1,388	501	8,958	2,110	501	10,712	2,442	589
1935	3,562	1,366	434	8,719	2,251	439	10,920	2,632	642
1936	3,847	1,402	425	9,544	2,473	489	11,679	2,605	630
1937	4,733	1,520	308	12,333	2,462	454	11,684	2,423	534

Average Duration of Stay.

The average duration of stay in hospital for all cases “ dismissed ” in 1937 was 28·45 days, as compared with 31·54 days in 1936 and 30·51 days in 1935. From Table III. below, it will be seen that at each of the three hospitals the average stay in 1937 was shorter than in the previous year.

TABLE III.

Hospital	Average Duration of Stay of Patients Discharged from or Dying in the Three General Hospitals		
	1935—Days	1936—Days	1937—Days
Booth Hall	24·23	32·31	28·12
Crumpsall	31·22	34·91	30·32
Withington	32·30	28·41	26·65
All Three Hospitals	30·51	31·54	28·45

These figures give proof of the increasing volume of acute work dealt with, as there are no significant variations in the number or length of stay of chronic cases.

“ Patient Days.”

The total number of patient-days represented by the “ dismissals ” of 1937 was 1,037,050, a decrease of 6,733 as compared with 1936. It will be appreciated that this decrease, taken especially with the increased number of admissions, confirms the decrease in the average length of stay. The increases and decreases in individual categories are shown in Table IV. below :—

TABLE IV.
CLASSIFICATION OF DISEASE GROUPS ACCORDING TO PATIENT-DAYS OF
DISCHARGES AND DEATHS IN GENERAL HOSPITALS,
1936 AND 1937.

DISEASE GROUP	PATIENT—DAYS		
	1937	1936	+ or —
*Healthy	128,230	116,031	+ 12,199
Diseases of the respiratory system	121,645	109,694	+ 11,951
Diseases of digestive system	108,299	86,465	+ 21,825
Infectious disease	99,395	114,649	— 15,254
Diseases of nervous system	92,004	123,468	— 31,464
Diseases of the circulatory system	88,798	104,087	— 15,289
Diseases of the skin	63,794	61,318	+ 7,476
Old age, senility, and senile decay	67,749	66,201	+ 1,548
† Violence	55,871	54,673	+ 1,198
Rheumatism, etc.	55,602	62,306	— 6,704
Diseases of genito-urinary system	49,682	47,500	+ 2,182
Cancer and other tumours	38,656	37,425	+ 1,231
Diseases of pregnancy, etc.	18,407	18,765	— 358
Diseases of bones, etc.	16,853	16,027	+ 826
Ill-defined diseases	11,443	9,121	+ 2,322
Diseases of early infancy	6,268	6,188	+ 80
Diseases of blood, etc.	5,009	7,196	— 2,187
Congenital malformations	3,903	2,310	+ 1,593
Chronic poisoning	366	193	+ 173
Convalescence	85	166	— 81
TOTALS	1,037,050	1,043,783	— 6,733

* Including mothers and infants discharged from maternity wards.

† Including tuberculosis patients.

‡ Including accidents associated with fracture.

In the absence of comparable figures over a long period, no comment is offered on the tables given above.

Table V. (days of maintenance and average stay in the individual hospitals according to disease groups), also exhibits many variations from the corresponding table for 1936, but here again no comment is offered.

TABLE V.

CLASSIFICATION (BY DISEASE GROUPS) OF DAYS OF MAINTENANCE OF PATIENTS
DISCHARGED FROM OR DYING IN THE GENERAL HOSPITALS, 1937.

DISEASE GROUP	BOOTH HALL		CRUMPSALL		WITHINGTON		TOTALS	
	Total Days	Average Stay	Total Days	Average Stay	Total Days	Average Stay	Total Days	Average Stay
1. †Infectious Disease	14,684	29.02	16,082	26.62	68,629	64.08	99,395	45.57
2. Cancer and other Tumours	49	24.50	19,340	41.86	19,267	46.54	38,656	44.03
3. Rheumatism. Diseases of Nutrition, etc.	17,569	55.42	19,707	37.90	18,326	33.69	55,602	40.26
4. Diseases of Blood and Blood-forming Organs	385	27.50	2,401	37.51	2,223	37.68	5,009	36.56
5. Chronic Poisoning	—	—	186	6.89	180	7.50	366	7.18
6. Diseases of Nervous System and Sense Organs	17,082	50.09	45,233	46.44	29,689	50.15	92,004	48.24
7. Diseases of Circulatory System	7,377	46.69	48,379	46.29	33,042	35.34	88,798	41.53
8. Diseases of Respiratory System	34,346	31.34	55,190	42.85	32,109	24.62	121,645	32.98
9. Diseases of Digestive System	31,738	14.54	40,422	26.84	36,130	22.15	108,290	20.35
10. Non-Venereal Diseases of Genito-Urinary System	4,173	32.86	25,053	28.15	20,456	22.78	49,682	25.94
11. Diseases of Pregnancy, Childbirth, and the Puerperal State	—	—	9,875	12.48	8,532	9.55	18,407	10.93
12. Diseases of Skin	24,131	33.10	17,440	25.95	27,223	40.63	68,794	33.22
13. Non-Tuberculous Diseases of Bones and Organs of Locomotion	7,526	101.70	3,530	40.11	5,797	48.71	16,853	59.97
14. Congenital Malformations	1,510	36.83	2,244	160.28	149	16.56	3,903	60.98
15. Diseases of Early Infancy	4,382	38.78	1,338	14.39	548	6.09	6,268	21.17
16. Old Age, Senility, and Senile Decay	—	—	57,099	181.27	10,650	43.47	67,749	120.98
17. ‡Violence	13,642	26.08	21,892	27.82	20,337	25.36	55,871	26.45
18. Ill-defined Diseases	4,981	25.03	5,310	21.85	1,152	12.52	11,443	21.43
19. Convalescence	85	2.43	—	—	—	—	85	2.43
20. *Healthy	841	8.16	71,647	14.72	55,742	13.12	128,230	13.91
Totals	184,501	28.12	462,368	30.32	390,181	26.65	1,037,050	28.45

Table VI. below is extracted from **Table V.** to show, in descending order, the average stay in hospital of the various disease groups, and last year's figures have been included for comparison.

TABLE VI.

CLASSIFICATION OF DISEASE GROUPS BY AVERAGE DURATION OF STAY (DISMISSALS FROM GENERAL HOSPITALS, 1935, 1936 and 1937).

Disease Group	Average Stay in Hospital		
	1935	1936	1937
	Days	Days	Days
Old age, senility, and senile decay	76·77	132·67	120·98
Congenital malformations	59·05	39·83	60·96
Diseases of bones, etc.	83·74	57·04	59·97
Diseases of nervous system	46·97	60·58	48·24
†Infectious disease	57·69	53·93	45·57
Cancer and other tumours	47·80	42·82	44·03
Diseases of circulatory system	44·13	53·29	41·53
Rheumatism, etc.	52·39	46·46	40·26
Diseases of blood	51·95	47·34	36·56
Diseases of skin	32·27	32·69	33·22
Diseases of respiratory system	30·34	33·63	32·98
‡Violence	29·53	30·54	26·45
Diseases of genito-urinary system	33·10	30·18	25·94
Ill-defined diseases	20·96	20·22	21·43
Diseases of early infancy	28·62	28·00	21·17
Diseases of digestive system	18·80	18·93	20·35
*Healthy	14·18	13·71	13·91
Diseases of pregnancy, etc.	18·89	12·52	10·93
Chronic poisoning	11·47	7·72	7·13
Convalescence	48·24	3·95	2·43
Average Stay—All Cases	30·51 days	31·54 days	28·45 days

* Including mothers and infants discharged from maternity wards.
† Including tuberculosis patients.
‡ Including accidents associated with fracture.

Table VII., showing allocation of “dismissals” to the various wards of the city, is capable of comparison with last year's figures because the element of duration of stay does not enter into it. The vast majority of patients enter and leave hospital within the same calendar year, and the table therefore gives a fairly good picture of the distribution of hospitalised sickness throughout the city. Even so, it relates only to the municipal hospitals. A development of the system to include the voluntary hospitals would complete the picture, and it is appropriate to mention at this point that one of the matters upon which the aid of the Manchester Joint Hospitals Advisory Board will be sought in the not distant future is the possibility of a standardised recording system for all hospital units serving the population of Manchester.

Dealing with **Table VII.** itself, it may be noted that of the 36 wards into which the city is divided, 25 have increased their calls on the hospital service, while 11 have sent fewer patients than they did last year.

TABLE VII.

ANALYSIS OF PATIENTS DISCHARGED FROM OR DYING IN THE
GENERAL HOSPITALS IN 1937, ACCORDING TO WARDS OF THE CITY.

City Ward	Estimated Population	TOTALS			TOTALS	Rate per 1,000 of Population
		Booth Hall	Crumpsall	Withington		
New Cross	22,498	307	1,194	66	1,567	69.65
Ardwick	23,247	380	80	980	1,440	61.94
St. Luke's	25,403	313	43	1,046	1,402	55.19
St. George's	24,156	345	32	962	1,339	55.43
Wythenshawe	34,510	297	17	1,020	1,334	38.66
All Saints	20,908	293	39	879	1,211	57.92
Bradford	27,855	240	892	52	1,184	42.51
Medlock Street	22,034	258	29	833	1,120	50.83
Withington	48,918	168	17	884	1,069	21.85
Cheetham	23,095	130	803	29	962	41.65
Collegiate Church	14,844	188	723	28	939	63.26
Miles Platting	21,259	222	668	32	922	43.37
Chorlton-cum-Hardy	46,741	92	22	796	910	19.89
Moss Side East	18,497	190	24	693	907	49.03
St. Michael's	17,776	174	704	29	907	51.02
Openshaw	21,391	205	608	86	899	42.03
Newton Heath	21,405	194	626	39	859	40.13
Moston	25,247	210	609	37	856	33.91
Harpurhey	19,876	170	640	17	827	41.61
Blackley	21,916	197	606	24	827	37.73
Moss Side West	18,920	139	14	647	800	42.28
St. Mark's	20,967	216	343	236	795	37.92
Collyhurst	16,579	163	585	33	781	47.11
Rusholme	21,764	106	21	654	781	35.88
Longsight	22,813	167	30	543	740	32.44
Gorton South	30,288	203	411	119	733	24.20
Beswick	26,083	147	488	86	721	27.64
Didsbury	26,897	107	8	549	664	24.69
Levenshulme	19,171	116	12	516	644	33.59
Crumpsall	16,261	82	501	22	605	37.21
Gorton North	20,482	123	388	71	582	28.42
St. John's	4,269	56	150	17	223	52.23
Oxford	624	8	65	24	97	155.45
St. Clement's	5,167	7	49	15	71	13.74
Exchange	291	1	15	4	20	68.42
St. Ann's	219	2	4	3	9	41.09
Outside the City	—	215	815	265	1,295	—
No settled abode	—	2	175	46	223	—
*Others	—	128	2,799	2,259	5,186	—

* "Others" include's:—

(a) Births (totalling 4,568).

(b) Staff cases.

(c) Cases in which the patient's address has not been obtainable.

It is clear that municipal hospitals to-day command a remarkably uniform degree of user from inhabitants of all districts of the city. The freedom from poor law, the excellence of the provision made, and the growing willingness of the citizens to recognise the value of specialised treatment of sickness and injury, are causing all sections of the community to turn to them in their need.

In accordance with custom, some notes are given on other facts revealed by the detailed tables on pp. 134 to 140 (Tables IX. and X.).

Infectious Disease.

Under this heading were 5.98 per cent. of the dismissals from the three general hospitals in 1937, as against a percentage of 6.42 recorded in 1936 and 6.53 in 1935. Tuberculosis represented 3.08 per cent. (3.24 in 1936); venereal disease, 0.66 per cent. (0.76 in 1936); other infectious disease, 2.24 per cent. (2.42 in 1936). There were 375 cases in the classification "influenza" as compared with 152 in 1936, and 246 in 1935. 242 cases of venereal disease were treated as against 253 in 1936. "Acquired" syphilis cases numbered 98 (114 in 1936), and cases of gonorrhœa 111 (102 in 1936).

Cancer, etc.

The number of cases in this group rose very slightly from 874 in 1936 to 878 in 1937. For 1935 the figure was 766. The largest individual increases were in cancer of the gall bladder and liver (25), and cancer of the thorax (24). There were 51 cases of uterine cancer, compared with 53 in 1936. Breast cancers fell from 83 to 62 and cancer of the stomach from 134 to 118. (See also special section on Cancer, pp. 130 to 133.)

Rheumatism and Chorea.

There was a slight increase in the number of cases under this heading, the dismissals for 1937 being 1,381, compared with 1,341 in 1936, and 1,406 in 1935. 317 of the patients were under 16 years of age, a percentage of 22.95 (20.88 in 1936). The number of choreas was 133, a decrease of 12 against last year. Acute rheumatism and sub-acute rheumatism remained practically stationary, the number being 319, against 316 last year and 360 in 1935.

Diabetes Mellitus.

Diabetes mellitus, which had receded from 204 in 1935 to 180 in 1936, altered very little, the figure for 1937 being 185.

Diseases of Nervous System.

1,907 cases were treated in this group, compared with 2,038 in 1936 and 2,030 in 1935. Only three items in this table call for comment. There was a fall in the diagnosis "neurasthenia" from 327 cases to 231, a reduction of 29·35 per cent. 1936 had shown a 24 per cent. decrease on 1935's figures under this heading. There was a fall of 64 in the category "Cerebral Hæmorrhage, etc.," principally occurring at Withington. There was a rise of 33 in "Infantile Convulsions, etc.," dealt with at Booth Hall.

Diseases of Circulatory System.

Myocardial disease was responsible for 808 admissions, as compared with 714 in 1936. Crumpsall received 133 more cases, Withington 41 fewer.

Diseases of Respiratory System.

There was a big increase in "Bronchitis"—1,674 cases against 1,297 in 1936. The increase is common to all three hospitals, there being 132 more cases at Booth Hall, 184 more at Crumpsall, and 61 more at Withington.

Diseases of Skin.

The rise of 195 in this category is partly attributable to the 93 additional cases of impetigo dealt with at Booth Hall. Other factors are the increase of 35 under the heading "Carbuncle, etc.," and the increase of 42 in "Eczema."

Diseases of Pregnancy.

Once again the records under this heading deserve special notice. Of 1,684 cases, only 19 died in hospital (1·12 per cent.). Crumpsall admitted 411 patients for ante-natal observation against 336 in 1936, and Withington admitted 498 against 395 the previous year.

Senility, etc.

Cases of senility continue to occupy a relatively large number of hospital beds, and the average duration of stay of the 560 cases dismissed in 1937 was in excess of 17 weeks.

Diseases of the Digestive System.

Following increases of 293 in 1935 and 312 in 1936, this classification is again higher in total by 755. There were 308 more tonsils and adenoids cases, accounting for nearly half of the increase. An increase of 72 in the cases of ulcer of the stomach and duodenum may be noted, following as it does upon an increase of 56 last year and 44 in 1935. Cirrhosis and other diseases of the liver, etc., records 28 more cases. Appendicitis has risen from 555 to 720. Hernia shows an increase of 50 at Crumpsall. The remaining increase in this group, however, is fairly evenly distributed over the classifications contained in it, and there are no noteworthy decreases.

Genito-Urinary System.

The increase of 341 in this group is chiefly attributable to a rise of 204 in cases of disease of the female genital organs. An increase of 122 was recorded last year. 151 of the extra cases were treated at Crumpsall, where genito-urinary work is the special province of one of the consulting surgeons.

Violence.

There was an increase in this class in 1937 of 322, principally caused by a rise of 247 in “ accidents without fracture ” cases. This is doubtless one result of the establishment of the casualty ward, where many industrial and domestic accidents are dealt with. Burns and scalds again showed increases.

The usual “ fracture-table ” is given below :—

TABLE VIII.
SHOWING THE NUMBERS OF “ FRACTURE ” CASES DISCHARGED FROM OR DYING IN THE CITY GENERAL HOSPITALS DURING THE YEARS 1936 AND 1937.

Length of Stay in Hospital	Booth Hall		Crumpsall		Withington	
	1936	1937	1936	1937	1936	1937
Under 28 days.. ..	54	54	189	203	243	249
29—52 days	31	38	52	59	63	71
Over 52 days	44	31	56	75	86	58
Total	129	123	297	337	392	378
Patients admitted from voluntary hospitals (included above)	60	51	91	117	151	130

Age-Group Tables.

Tables XI., XII., XIII., and XIV., on pages 142 to 149, show the age distribution of patients. The tables show the figures for disease groups only. Full information of each specified disease is kept in the departmental records, and is available for detailed investigations as required.

Booth Hall's increases of 555 in the 0—5 years group, and of 292 in the 6—10 group are mainly due to the tonsils and adenoids category in the detailed disease tables.

Crumpsall shows increases in every age-group but one, most notable being the rises of 720 in the 26—40 group, 334 in the 51—60 group, and 398 in the 61—70 group. The jump in the 0—5 group of 433 is, of course, representative of the increased maternity work of the hospital, these children being practically all infants born in hospital. The extra cases in the older groups are chiefly to be found in the "respiratory diseases" column, and are no doubt related to the increase in "bronchitis" noted elsewhere.

The age distribution of Withington's patients exhibits little variation from that of 1936: certainly there is no single increase or decrease necessitating special comment.

Sources of Admission.

Table XV., on p. 150 (showing the sources of admission of patients), follows again the path which we have come to regard as customary. The number of patients sent in by general practitioners direct again increased, the measure of increase this time being 20·28 per cent. The actual figures were 15,126 for 1937, as against 12,576 for 1936. The number of patients sent in to hospital by district medical officers fell again from 5,064 in 1936 to 3,538 in 1937. It may be noted that in four years (1934 to 1937 inclusive), the number of admissions from general practitioners has risen from 9,323 to 15,126, while during the same period, the admissions from district medical officers have fallen from 6,924 to 3,538. The number of "other" admissions increased from 6,366 in 1936 to 6,799 in 1937. The number of patients transferred from voluntary hospitals increased from 2,855 to 4,591, much the highest figure for this type of admission yet recorded. The largest increase in this type of admission occurred at Withington Hospital, where 2,130 transfers from voluntary hospitals were accepted, against 1,078 in 1936 and 862 in 1935. The number of staff cases rose from 148 to 232 (this figure refers only to staff treated in the wards of the hospital, and not to staff absent from duty but treated in their own quarters). Maternity and child welfare centres sent in 61 patients direct. Accident wards were the medium in 336 cases. The only increase in this last category was at Withington Hospital—61 more cases. Special reference to this department of Withington Hospital is made in the Medical Superintendent's report (see pp. 246 to 250).

Recovery of Costs of Hospital Maintenance.

During the financial year ended March 31st, 1937, the amounts recovered under this heading were as follows :—

From	Booth Hall	Crumpsall	Langho	Rose Hill	Withington
	£	£	£	£	£
Paying patients at fixed weekly charges	144	2,955	Nil	Nil	6,025
Patients' relatives according to means ..	1,660	13,348	974	149	13,710

Grand total £38,965

The sums recovered from out-patients by the Almoner at Withington Hospital are set out in the Medical Superintendent's report on page 252

Hospital Contributory Funds.

The Public Health Committee have agreements with a number of contributory funds in the city, under which contributors are treated in municipal hospitals and are relieved of all assessment of means, etc., in consideration of the funds paying agreed rates for the treatment of their members. A new agreement was concluded during 1937 with the Manchester City Police and Fire Brigade Hospital Beds Endowment Fund, the agreement being on similar lines to the others, and providing for the treatment of members and their families, both as in-patients and as out-patients.

Transport of Patients' Relatives to Abergele Sanatorium.

A Manchester organisation known as "The Round Table" offered, during the year, to transport poor persons wishing to see their children at Abergele Sanatorium, free of charge on Sundays. The members of the organisation generously used their private cars for this purpose, and within the short period of three months, 42 persons were taken to the sanatorium free of all cost to themselves.

It is a great pleasure to acknowledge such a thoughtful and kindly piece of voluntary service.

Training and Examination of Pupil Midwives.

In April, 1937, the Minister of Health approved the new rules of the C.M.B. regulating the course of training and the conducting of examinations of candidates for admission to the roll of midwives. Applications were submitted in the prescribed forms, for the approval of Crumpsall and Withington Hospitals as recognised institutions under the new rules, and for the approval of various lecturers and teachers of midwifery at these hospitals. The applications were made in respect of Part I. training only, as it is not intended that these two hospitals shall function under Part II. (Negotiations are in progress with St. Mary's Hospital, Manchester, a voluntary institution, for St. Mary's to obtain Part II. recognition, and for the two municipal hospitals to co-operate with St. Mary's in the provision of a complete training course for pupils in Manchester.) The approval by the C.M.B. of both hospitals for training in Part I. has been received during the current year (1938).

Crumpsall Hospital.

In co-operation with the Town Planning and Transport committees a combined hospital lodge, water-meter house, and bus shelter was erected outside Crumpsall Hospital in 1937. The new building has been of great benefit to visitors to the hospital, who are now able to wait for conveyances under cover.

Broadcast Call Systems.

At Crumpsall and Withington Hospitals, broadcast call systems were installed, which enable medical officers to be called when required, wherever they may be in the hospital. These systems have greatly facilitated the work of the two hospitals and have obviated a great deal of telephoning round the wards for doctors, which was previously necessary.

Hours of Working of Nurses.

The Committee during 1937 gave much consideration to the working conditions of nursing staff, especially in relation to hours of duty. They considered statements showing the approximate financial effect of the introduction of either a 48-hour or a 54-hour working week for nurses in the Corporation hospitals. While authorising a continuance of investigations into the problem, the Committee felt it advisable at the same time to remit the matter to the Manchester Joint Hospitals Advisory Board, with an expression of opinion that a considerable reduction in the working hours of the nurses was essential. This matter is, as is well known, receiving attention all over the country, and a departmental committee has been appointed to investigate it from a national standpoint. The Public Health Committee, while not desirous of anticipating the findings of this Committee, nevertheless consider that a shorter working week should be introduced, and have referred the matter to a sub-committee for consideration and report as to action to be taken.

The working hours of domestics at Baguley Sanatorium were reduced in October, 1937, to a standard of 56 per week, and the Committee approved of the introduction of a 48-hour week for these employees, as and when this is practicable.

Rose Hill Convalescent Home.

The field of admission of children to the Rose Hill Convalescent Home was extended in March, 1937, to include admissions from the various districts of the city direct. Previously, admissions to Rose Hill were only effected via Booth Hall Hospital, so that Rose Hill was in fact a convalescent unit of Booth Hall. From various causes the bed-occupancy of Rose Hill had fallen considerably, and this fact enabled the committee by this extension of mode of admission to meet a known need for convalescent treatment of sick children in the city.

Use of Proprietary Preparations.

During 1937 an investigation was made into the use of proprietary preparations at the Corporation hospitals. Discussions were held at which the consultant pharmacologist (Professor MacDonald) and the consultant pharmacist (Mr. Brindle) attended, to talk over with the medical superintendents of the hospitals the various points involved. These discussions were successful, in that agreement was reached as to alternatives for a number of proprietary preparations, while in certain other cases the medical superintendents agreed to try out possible alternatives to expensive preparations then used. One result of the discussions was that a personal letter was sent to each member of the consultant medical and surgical staff asking for their co-operation in this important matter, and several useful changes have been made, with the goodwill of all the medical and pharmaceutical officers concerned.

Baguley Sanatorium Extension.

The City Council in 1937 approved a report asking for additional expenditure on the extension to Baguley Sanatorium. The original estimated cost was £71,150, and this had to be increased to £85,600, owing principally to an increase in the prices of materials and building work since the original estimate was prepared.

At the time of writing this report the position is that a contract has been let for the building work in connection with the extension, and building is now in progress.

Isolation of Complicated Maternity Cases.

The Public Health Committee decided in November, 1937, on the recommendation of the Medical Officer of Health, to provide isolation accommodation for complicated maternity cases admitted to Withington and Crumpsall Hospitals. The scheme approved involved the provision of single cubicle wards in each case, into which will be admitted any pyrexial cases arising in the ordinary maternity wards, and any cases in which, owing to interference prior to admission to hospital, it is considered that complications may ensue.

Works of Minor Improvement.

In 1937, as in previous years, many works of minor improvement were carried out at the hospitals and institutions. It is impracticable to list all these individually and it is difficult to make a selection of them for notice here, as they are all of relatively the same importance when considered in relation to the needs of the establishments at which they were carried out. It has been considered sufficient this year, therefore, to record the fact that these minor works continued on the same scale as previously, and through them many advances have been made in the level of treatment and maintenance of patients and inmates. Improvements making for added comfort for resident and non-resident staffs were also carried out.

Staff.

Dr. J. T. D'Ewart retired in 1937 from the medical superintendency of Booth Hall Hospital, a post which he had held since 1920. Dr. W. H. Patterson, deputy medical superintendent, was appointed to succeed him. Later in the year Miss E. Ashton, matron, Booth Hall, also retired, and Miss C. K. Lees, matron of the Prince of Wales' Hospital, Plymouth, was appointed to the vacancy.

1937 was the last complete year of service of Miss Margaret Duffill, matron of Baguley Sanatorium since 1912. Miss Duffill actually retired in January, 1938. Miss N. Burrows, Bootle General Hospital, Liverpool, was appointed to succeed her.

There were no other changes in senior staff during the year, and it is pleasing to record that the work of the staff generally in the hospitals and institutions continued to be of a very high standard.

Pathological Service.

The pathological service of the general hospitals was reorganised in 1937. Much constructive assistance was given by Dr. G. D. Dawson, the pathologist, in the task of building up the nucleus of a service which, it is confidently hoped, will meet the requirements of the hospitals for several years to come.

The old service consisted of :—

Staff.—One pathologist, one assistant pathologist, five technicians, two laboratory “boys,” and one woman cleaner.

Laboratories.—One fully staffed (as above) and fully equipped, at Crumpsall Hospital, and two subsidiary laboratories without separate staffs and with limited equipment, one each at Withington Hospital and Booth Hall Hospital.

During the four years 1933–1936 inclusive, the demands of the hospitals on this laboratory and its two subsidiaries had grown to a degree which made expansion inevitable. The percentage increases in the more important and lengthy pathological tests were very great—*e.g.*, fractional gastric analyses, 880 per cent. increase in 1936 over 1933; pregnancy tests, 270 per cent.; examination of tumours, 49 per cent.; Wassermann's, 39 per cent.

The consultant and resident medical staffs were complaining of delay in the return of reports, the pathologist and his assistant were losing valuable time travelling to and from the hospitals, and there was the special risk of loss or damage of specimens in transit.

It was recognised that, to meet all needs, a separate, fully-staffed and equipped laboratory was required at each hospital.

The new service provides for such separate laboratories at Crumpsall and Withington, but not at Booth Hall. It is certain that the growth of this service will before long necessitate the establishment of a separate laboratory at Booth Hall also.

The reorganised service was put under the control of Dr. Dawson, as Director of Pathological Services. Dr. G. S. Smith, formerly assistant pathologist, became the pathologist to Withington Hospital. An assistant pathologist for Crumpsall was appointed to succeed Dr. Smith. Three new technicians were appointed, together with the necessary laboratory boys and clerks. The new Withington laboratory began its work in October, 1937, and particulars of the tests and examinations carried out there up to the end of the year will be found in Table XVI. Wassermann tests are not now done at either laboratory, but are sent out to the University's laboratory at York Place.

Unfortunately, just as the new service was put into operation, Dr. Dawson fell ill, and it is a matter of great regret that he has not been able to recover his health, and that he was compelled to give up his work in the early part of 1938.

It is with pleasure that an acknowledgment is here made of the work of Dr. Dawson on this scheme, and of the work of Dr. Smith during the very difficult period which followed Dr. Dawson's breakdown in health.

EXAMINATIONS MADE AT THE PATHOLOGICAL LABORATORIES DURING THE YEAR ENDED 31st DECEMBER, 1937.

TYPE OF EXAMINATION	NUMBER OF EXAMINATIONS MADE				TOTAL
	At Crumpsall Laboratory for			At Withington Laboratory (for Withington only)	
	Crumpsall Hospital	Booth Hall Hospital	Withington Hospital		
Diphtheria tests	188	13,869	83	25	14,165
Sputum tests—					
Tubercle bacilli	3,496	147	3,144	1,042	7,829
Pneumococcus typing	7	—	1	—	8
Blood—					
Wassermann reactions	777	50	366	—	1,193
Kahn tests	354	29	151	—	534
Counts	1,778	245	561	284	2,868
Reticulocytes	158	—	77	—	235
Sugar	1,825	18	1,375	751	3,969
Urea	854	63	483	142	1,542
Culture	67	18	19	20	124
Agglutination	37	4	22	2	65
Grouping	142	4	66	25	237
Calcium	8	23	11	3	45
Bleeding time	14	31	1	—	46
Coagulation time	14	23	—	2	39
van den Bergh	36	17	9	4	66
Sedimentation rate	24	—	—	1	25
Red cell fragility test	12	4	—	3	19
Smears for gonococcus	413	133	185	32	763
Urine—					
Microscopical examination	1,986	261	1,008	337	3,592
Cultural examination	1,417	238	752	288	2,695
Chemical examination	199	9	254	60	522
Phenol red test	89	—	—	—	89
Fæces—					
Microscopical examination	38	6	32	4	80
Cultural examination	73	24	56	19	172
Chemical examination	190	8	107	25	330
C.S. Fluid—					
Microscopical examination	289	168	115	31	603
Cultural examination	23	20	10	3	56
Chemical examination	229	135	97	26	487
Lange colloidal gold	98	3	25	—	126
Wassermann reaction	93	4	31	—	128
Pus—					
Microscopical examination	217	174	110	59	560
Cultural examination	236	393	139	54	822
Effusion—					
Microscopical examination	197	88	119	19	423
Cultural examination	81	22	25	13	141
Friedman tests	63	1	103	—	167
Tumours	383	35	225	111	754
Post-mortem examinations	158	56	22	53	289
Fractional gastric analysis	383	4	171	70	628
Vaccines	46	16	14	3	79
Basal metabolic rate	16	—	23	15	54
Miscellaneous, including—					
Urine—diastatic index, Bence Jones' protein test, lactose, glucose, ascorbic acid, sugar. Blood-cholesterol, phosphates, spectroscopic. Sputum-culture, concentration, tumour cells, elastic tissue. Fæces-fats, parasites, ova, amœbæ. Fluid tr. vaginalis. Scrapings fungus, ringworm. Meningo typing. Vesical calculus culture	71	30	64	44	209
	16,779	16,373	10,056	3,570	46,778

In addition, the following tests were done at Crumpsall Hospital:—

Rose Hill Convalescent Home: swabs for diphtheria bacilli	484
Rose Hill Convalescent Home: swabs for Hæmolytic streptococci	196
Swinton Home: swabs for diphtheria bacilli	1
Monsall Hospital: Friedman tests	1

Total 47,460

The following figures show how the volume of pathological work has increased during the past seven years :—

Year ending December 31st	Number of Pathological Examinations
1931	21,611
1932	28,393
1933	29,611
1934	31,623
1935	37,654
1936	42,958
1937	47,460

Diagnosis and Treatment of Cancer in Municipal Hospitals.

In last year's report a full statement was given of the provision made in Manchester for the diagnosis and treatment of cancer, and it is only necessary this year to record that the facilities continued to be used to the full.

Arrangements were made during 1937 for one alteration in the organisation dealing with this disease, *i.e.*, the concentration in Withington Hospital of all " radium " cancer cases admitted to municipal hospitals. This change did not actually become operative until 1938. The advantages of this rearrangement were mentioned in the 1936 report, in a paragraph foreshadowing the change.

It has been thought wise to retain the special statistical tables which were appended to the cancer section of the 1936 report, as they are likely to be of permanent value in the constant search for information on the subject of this disease, and the records then printed have accordingly been brought up-to-date by the addition of 1937's figures, and are given in Tables A to K which follow. It should be noted that the apparent discrepancy between the totals given in Tables A to K and those for the cancer group in other tables in this report are due to the exclusion from Tables A to K of the classification " Other Tumours."

TABLE A.
DEATHS FROM CANCER FOR THE YEAR 1937 CLASSIFIED IN AGE GROUPS AND ACCORDING TO SITES—MALE AND FEMALE.

CANCER	All Ages			0—1			1—5			5—10			10—15			15—20			20—25			25—35			35—45			45—55			55—65			65—75			75—85			85—		
	Total	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.			
Buccal Cavity	77	69	8	1	..	1	1	1	..	3	1	2	5	5	..	19	16	3	38	36	2	10	10
Digestive organs, Oesophagus, Peritoneum..	649	331	318	1	..	1	12	6	6	36	21	15	79	47	32	188	101	87	235	123	112	88	32	56	10	1	9
Respiratory	156	133	23	1	..	1	1	1	..	7	5	2	15	13	2	32	28	4	60	53	7	34	28	6	6	5	1
Male and Female Genital Organs.. .. .	167	61	106	1	..	1	2	1	1	2	..	2	11	1	10	40	5	35	50	18	32	40	25	15	20	10	10	1	1	..
Breast	122	1	121	12	..	12	28	..	28	34	1	33	33	..	33	14	..	14	1	..	1	
Skin	13	7	6	1	1	1	..	1	5	2	3	3	2	1	3	2	1
Others or unspecified	63	24	39	1	..	1	1	1	1	1	..	1	..	1	2	..	2	3	1	2	7	3	4	13	5	8	23	10	13	7	2	5	4	1	3
Totals	1247	626	621	1	..	1	1	1	5	1	4	4	2	2	25	13	12	80	37	43	192	88	104	369	196	173	406	224	182	148	61	87	16	3	13

TABLE C.
CLASSIFICATION ACCORDING TO SITE.

	BOOTH HALL								CRUMPSALL								WITHINGTON								TOTALS																Totals for 4 years
	1934		1935		1936		1937		1934		1935		1936		1937		1934		1935		1936		1937		1934		1935		1936		1937										
	Dis.	Died	Dis.	Died	Dis.	Died	Dis.	Died	Dis.	Died	Dis.	Died	Dis.	Died	Dis.	Died	Dis.	Died	Dis.	Died	Dis.	Died	Dis.	Died	Dis.	Died	Dis.	Died	Dis.	Died	Dis.	Died									
CANCER OF:—																																									
Lip, Mouth, and Pharynx .. ..	...	...	...	...	...	...	...	...	16	13	13	17	12	15	12	22	10	21	7	29	17	18	17	19	26	34	20	46	29	33	29	41	104	154
Larynx .. . . .	...	...	...	...	..	...	...	...	1	6	2	7	1	5	5	9	1	10	1	5	2	3	4	4	2	16	3	12	3	8	9	13	17	49
Thorax (bronchi, lungs, mediastinum, pleura, pericardium) .. . .	...	1	...	...	..	...	...	...	7	17	6	21	10	21	17	30	10	19	10	41	7	33	16	32	17	37	16	62	17	54	33	62	83	215
Oesophagus .. . . .	...	1	...	...	..	...	...	...	7	8	2	10	9	9	2	13	8	11	5	19	5	16	8	10	15	20	7	29	14	25	10	23	46	57
Stomach .. . . .	...	...	...	...	..	...	...	...	17	23	9	35	19	42	28	38	31	47	31	46	26	47	25	27	48	70	40	81	45	89	53	65	186	305
Intestines (anus, appendix, cæcum, caput coli, colon, duodenum, ileum, jejunum, rectum, sigmoid, etc.)..	...	...	...	...	..	...	...	...	31	37	27	32	35	36	37	49	47	40	36	41	36	62	39	45	78	77	63	73	71	98	76	94	289	341
Pancreas .. . . .	...	...	...	...	..	...	...	...	...	4	3	4	2	7	1	2	2	3	3	1	1	2	1	5	2	7	6	5	3	9	2	7	13	28
Gall bladder and liver .. . .	...	...	...	...	..	...	...	...	1	11	2	16	4	13	12	28	3	10	2	10	7	8	5	12	4	21	4	26	11	21	17	40	36	108
Peritoneum	1	...	...	...	...	...	...	...	...	...	1	...	1	1	...	...	1	1	...	...	1	...	1	2	2	1	1	...	2	1	1	2	6	4
Respiratory organs .. . . .	...	...	...	...	...	...	...	...	...	...	2	2	4	1	2	...	2	4	...	1	3	1	...	3	2	4	2	3	7	2	2	3	13	12
Uterus .. . . .	...	...	...	...	...	...	...	...	7	1	13	14	9	5	14	9	28	22	16	17	24	15	21	7	35	23	29	31	33	20	35	16	132	30
Other female genital organs .. .	...	...	...	...	1	...	...	...	9	7	10	9	29	14	19	13	26	9	13	19	9	13	14	14	35	16	23	28	39	28	33	27	130	99
Breast .. . . .	...	...	...	...	...	...	...	...	15	10	11	6	16	12	12	16	19	18	21	15	31	24	23	11	34	28	32	21	47	36	35	27	148	112
Male genito-urinary organs .. .	...	...	...	...	...	...	...	...	4	5	3	3	14	2	12	6	6	8	3	13	10	13	6	8	10	13	6	16	24	15	18	14	57	59
Skin .. . . .	...	...	...	...	...	...	...	...	4	2	..	...	1	2	5	2	7	...	2	...	3	...	1	...	11	2	2	...	4	2	6	2	23	8
Other or unspecified organs .. .	...	...	1	1	...	...	...	...	5	7	6	13	11	13	12	7	8	9	12	6	5	9	2	11	13	16	19	20	16	22	14	18	62	78	
Totals	1	2	1	1	1	...	...	...	124	151	110	189	177	198	190	244	209	232	162	263	187	265	183	210	334	385	273	453	365	463	373	454	1345	1755				
	3		2		1		—		275		299		375		434		441		425		452		393		719		726		828		827		3100								

TABLE E.
ANALYSIS BY AGE GROUP.

	BOOTH HALL								CRUMPSALL								WITHINOTON								TOTALS							
	Discharged				Died				Discharged				Died				Discharged				Died				Discharged				Died			
	1934	1935	1936	1937	1934	1935	1936	1937	1934	1935	1936	1937	1934	1935	1936	1937	1934	1935	1936	1937	1934	1935	1936	1937	1934	1935	1936	1937	1934	1935	1936	1937
0—5	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	1	..	..	..	..	1	..
6—10	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..
11—15..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..
16—25..	3	2	1	..	..	1	2	3	2	1	1	..	1	3	2	3	5	3	2	..	1	4
26—40..	8	6	12	21	7	11	12	12	28	11	11	18	8	12	12	13	36	17	23	39	15	23	24	25
41—50..	26	20	38	25	18	19	19	28	49	24	35	37	41	37	42	24	75	44	73	62	59	56	61	52
51—60..	1	..	..	..	36	28	48	54	33	41	43	59	43	52	59	49	68	73	78	49	79	80	107	103	102	114	121	108
61—70..	39	39	55	62	60	82	68	89	56	52	51	53	78	88	85	73	95	91	106	115	138	170	153	167
71—80..	13	17	20	22	31	32	49	50	28	19	26	23	33	50	40	40	41	36	46	45	64	82	89	90
81+	2	..	1	4	1	4	7	5	3	1	3	2	3	3	6	3	5	1	4	6	4	7	13	8
Totals	1	1	1	..	2	1	..	..	124	110	177	190	151	189	198	244	209	162	187	183	232	263	265	210	334	273	365	373	385	453	463	454

CANCER CASES " DISMISSED " FROM MANCHESTER MUNICIPAL GENERAL
HOSPITALS DURING THE YEARS 1934, 1935, 1936, AND 1937.

TABLE B.
Numbers dealt with.

	Discharged				Died				Totals				Totals for 4 years
	1934	1935	1936	1937	1934	1935	1936	1937	1934	1935	1936	1937	
TH HALL	1	1	1	..	2	1	..	..	3	2	1	..	8
MPSELL	124	110	177	190	151	189	198	244	275	299	375	434	1,411
INGTON	209	162	187	183	232	263	265	210	441	425	452	393	1,732
Totals	334	273	365	373	385	453	463	454	719	726	828	827	3,151

TABLE D.
DURATION OF STAY IN HOSPITAL—(DAYS).

	1934	1935	1936	1937	Average Stay (all Cases)			
					1934	1935	1936	1937
TH HALL... ..	60	95	11	—	20·0	47·5	11·0	—
MPSELL	24098	18606	15809	19918	87·63	62·23	42·15	45·39
INGTON	38262	30964	18510	18706	86·76	72·86	40·95	47·59
Totals	62420	49665	34330	38624	86·81	63·40	41·46	46·70

TABLE F.
ANALYSIS BY SEX.

	BOOTH HALL				CRUMPSALL				WITHINGTON				TOTALS			
	1934		1935		1934		1935		1934		1935		1934		1935	
	1934	1935	1936	1937	1934	1935	1936	1937	1934	1935	1936	1937	1934	1935	1936	1937
MALES	2	1	1	..	170	174	203	234	191	213	207	199	363	388	411	433
FEMALES	1	1	..	..	105	125	172	200	250	212	245	194	356	338	417	394
Totals	3	2	1	..	275	299	375	434	441	425	452	393	719	726	828	827

Totals for 4 years—Males, 1,595. Females, 1,505. Total, 3,100.

TABLE G.
ANALYSIS BY SOURCE OF ADMISSION.

	BOOTH HALL				CRUMPSALL				WITHINGTON				TOTALS				Totals for 4 years	
	1934	1935	1936	1937	1934	1935	1936	1937	1934	1935	1936	1937	1934	1935	1936	1937		
Accident Ward ..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	2
D.M.O. . . . .	..	..	..	..	119	133	159	103	124	87	57	33	243	220	216	136	815	
General Practitioner	2	2	..	..	82	109	152	263	193	269	321	301	277	380	473	564	1694	
Emergency .. ..	..	..	..	..	3	3	6	6	35	11	14	12	38	14	20	18	90	
Vol. Hospital ..	1	..	1	..	38	29	26	38	37	48	47	42	76	77	74	80	307	
City Institutions..	..	..	..	..	31	22	22	16	10	8	6	2	41	30	28	18	117	
City Hospitals ..	..	..	..	..	2	2	5	1	3	1	2	1	5	3	7	2	17	
Birth .. .. .	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	1	
M. & C. W. Dept.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Staff Case .. ..	..	..	..	..	..	..	..	1	..	1	..	..	..	1	..	1	2	
Other or not stated	..	..	..	..	..	..	5	5	39	..	4	2	39	..	9	7	55	
Totals	3	2	1	..	275	299	375	434	441	425	452	393	719	726	828	827	3100	

TABLE H.
CASES SEEN BY RADIUM THERAPIST.

		BOOTH HALL	CRUMPSALL	WITHINGTON	TOTALS
1934	..	|	65	52	117
1935	..	|	63	56	119
1936	..	|	77	58	135
1937	..	|	78	40	118
Totals	..	|	283	206	489 = 15.8% of all cases.

ANALYSIS OF DISCHARGES.

Discharged to	BOOTH HALL				CRUMPSALL				WITHINGTON				TOTALS				Totals for 4 years
	1934	1935	1936	1937	1934	1935	1936	1937	1934	1935	1936	1937	1934	1935	1936	1937	
Own Home	1	1	..	..	103	101	158	173	189	138	164	167	293	240	322	340	1195
City Institution ..	..	..	..	..	16	7	6	4	8	6	12	6	24	13	18	10	65
City Hospital ..	..	..	1	..	2	..	3	1	5	5	4	3	7	5	8	4	24
Voluntary Hospital	..	..	..	..	3	1	..	..	7	3	..	..	10	4	..	..	14
Convalescent Home	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Staff case—to duty	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Died	2	1	..	..	151	189	198	244	232	263	265	210	385	453	463	454	1755
Indiscipline ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Absconded .. ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Other Hospital or Institution ..	..	..	..	..	..	1	10	12	..	10	7	7	..	11	17	19	47
Totals	3	2	1	..	275	299	375	434	441	425	452	393	719	726	828	827	3100
Against advice .. (cases included in above table)	..	..	..	..	16	3	33	15	49	38	34	38	65	41	67	53	226

TABLE K.
ANALYSIS OF PATIENTS' CONDITION ON DISCHARGE.

CONDITION	BOOTH HALL				CRUMPSALL				WITHINGTON				TOTALS				Totals for 4 years
	1934	1935	1936	1937	1934	1935	1936	1937	1934	1935	1936	1937	1934	1935	1936	1937	
Improved*	1	1	..	..	60	41	79	97	151	95	105	109	212	137	184	206	739
No change	..	..	1	..	58	63	89	82	55	65	67	61	113	128	157	143	541
Worse	..	..	..	..	6	6	9	8	3	2	15	7	9	8	24	15	56
Totals	1	1	1	..	124	110	177	187	209	162	187	177	334	273	365	364	1336

* "Improved" includes cases which are cured but which cannot be definitely classified as "cured" in the absence of a follow-up system which would enable the classification to be confirmed.

TABLE IX.

CLASSIFICATION (ACCORDING TO DISEASES) OF PERSONS WHO WERE DISCHARGED FROM, OR WHO DIED IN THE MUNICIPAL GENERAL HOSPITALS DURING THE YEAR ENDED DECEMBER 31st, 1937.

Disease Group	Disease	Booth Hall Hospital				Grumpsall Hospital				Withington Hospital				Totals	
		Children under 16		Men and Women		Children under 16		Men and Women		Children under 16		Men and Women			
		Disch.	Died	Disch.	Died	Disch.	Died	Disch.	Died	Disch.	Died	Disch.	Died		
INFECTIOUS DISEASE	Enteric Fever ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Smallpox ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Measles ..	131	12	3	—	—	—	—	—	—	—	—	—	—	147
	Scarlet Fever ..	19	—	3	—	—	—	—	—	—	—	—	—	—	26
	Whooping Cough ..	71	10	—	—	—	—	—	—	—	—	—	—	—	83
	Diphtheria ..	27	2	1	—	2	—	—	—	—	—	—	—	—	38
	Influenza ..	12	—	9	—	1	—	—	5	—	—	138	2	—	330
	Influenzal Pneumonia ..	4	—	—	—	—	—	6	—	—	—	12	14	—	45
	Dysentery ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Erysipelas ..	—	—	—	—	1	—	—	—	—	—	19	—	—	35
	Poliomyelitis ..	7	—	—	—	—	—	—	—	—	—	1	—	—	8
	Acute Lethargic Encephalitis ..	1	—	—	—	—	—	—	—	—	—	—	—	—	4
	Cerebro-spinal Fever ..	24	1	—	—	—	—	—	—	—	—	5	—	—	30
	Anthrax ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Tetanus ..	—	1	—	—	—	—	—	—	—	—	—	—	—	1
	Tuberculosis—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Pulmonary, Thoracic, and Respiratory System ..	26	7	—	—	2	—	113	19	6	1	499	258	—	931
	Bones and Joints ..	11	—	—	—	—	—	11	3	1	—	32	4	—	62
	Abdominal Peritonitis ..	3	1	—	—	1	—	10	1	—	—	4	2	—	22
	Peripheral Glands ..	14	1	—	—	—	—	5	—	—	—	10	—	—	30
	Meningitis and Brain ..	2	28	—	—	—	1	—	6	—	—	2	7	—	44
	Skin (Lupus) ..	—	—	—	—	—	—	1	1	—	—	2	—	—	3
	Urino-genital ..	—	—	—	—	—	—	5	—	—	—	2	—	—	8
	Toxotubercule ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Bazin's Disease ..	—	—	—	—	—	—	—	—	—	1	—	—	—	1
	Ulceration of the Skin ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Empyema ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Fistula ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Soft Palate ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Other sites and ill-defined ..	9	4	—	—	4	—	5	—	—	—	—	—	—	5
	Syphilis—Congenital ..	7	—	—	—	—	—	5	—	—	—	—	—	—	17
	Acquired ..	2	1	1	—	—	—	5	—	—	—	—	—	—	21
	Gonorrhœa ..	3	—	—	—	—	—	77	1	—	—	16	1	—	98
	Gonorrhœal Ophthalmia ..	—	—	—	—	—	—	96	—	—	—	10	—	—	111
	Other Venereal Disease ..	—	—	—	—	—	—	7	—	—	—	—	—	—	2
	Undulant Fever ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Purulent Infection, Septicæmia (but not Puerperal) ..	—	3	—	—	—	—	2	9	—	—	—	3	—	18
	Malaria ..	—	—	—	—	—	—	—	—	—	—	—	—	—	2
	Hydatid Cysts ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Mycoses ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	German Measles ..	3	—	—	—	—	—	—	—	—	—	—	—	—	—
	Chickenpox ..	30	—	—	—	—	—	—	—	—	—	—	—	—	—
	Mumps ..	1	—	1	—	—	—	—	—	—	—	—	—	—	—
	Pemphigus Neonatorum ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Other Infectious Diseases ..	7	—	—	—	—	—	—	—	—	—	—	—	—	—
TOTALS		417	71	18	—	15	1	536	52	11	1	767	292	2,181	

Disease Group	Disease	Booth Hall Hospital				Crumpsall Hospital				Withington Hospital				Totals
		Children under 16		Men and Women		Children under 16		Men and Women		Children under 16		Men and Women		
		Disch.	Died	Disch.	Died	Disch.	Died	Disch.	Died	Disch.	Died	Disch.	Died	
DISEASES OF NERVOUS SYSTEM AND SENSE ORGANS, OTHER THAN ENCEPHALITIS LETHARGICA	Cerebral Abscess	—	—	—	—	—	—	4	10	—	—	3	4	21
	Encephalitis, including Chronic Encephalitis Lethargica	—	2	—	—	1	—	32	5	—	—	12	3	55
	Meningitis, other than Tuberculosis	4	1	—	—	—	—	3	7	—	—	—	5	20
	Tabes Dorsalis	—	—	—	—	—	—	6	5	—	—	9	2	22
	Disseminated Sclerosis	—	—	—	—	—	—	21	3	—	—	13	3	40
	Other Diseases of Spinal Cord	—	—	2	—	—	—	10	2	—	—	5	1	20
	Cerebral Hæmorrhage, Embolism, and Thrombosis..	—	3	—	1	2	2	54	141	—	4	84	111	402
	General Paralysis of the Insane	1	—	—	—	—	—	2	2	—	—	1	1	7
	Senile Dementia	—	—	—	—	—	—	37	—	—	—	1	3	41
	Other forms of Insanity	—	—	—	—	—	—	159	—	—	—	12	1	172
	Epilepsy	10	—	—	—	1	—	68	2	—	—	42	1	124
	Infantile Convulsions	47	7	—	—	—	—	—	—	1	1	—	—	57
	Hysteria and Hystero-epilepsy	2	—	—	—	—	—	44	—	—	—	16	—	62
	Neurasthenia	2	—	—	—	—	—	129	1	—	—	97	2	231
	Mental Deficiency (including idiocy, imbecility, and Mongolism)	11	2	—	—	—	—	21	—	—	—	1	—	35
	Other Disease of Nervous System (other than chorea, sciatica, and rheumatic neuritis)	18	—	—	—	—	—	123	2	—	—	71	5	219
	Diseases of Eye	17	2	—	—	—	—	26	—	—	—	18	3	66
	Diseases of Ear and Mastoid Sinus	201	6	2	—	2	1	44	2	3	1	48	3	313
	TOTALS		313	23	4	1	6	3	783	182	4	6	434	148	1,907
DISEASES OF CIRCULATORY SYSTEM	Pericarditis	5	6	—	—	—	1	3	1	—	—	6	2	24
	Endocarditis	27	6	—	—	—	—	7	5	—	—	12	10	67
	Valvular Disease of Heart	6	1	—	—	—	—	90	8	—	—	62	26	193
	Diseases of Myocardium	—	2	1	1	—	—	173	269	1	1	111	250	808
	Diseases of Coronary Arteries	—	—	—	—	—	—	29	3	—	—	10	3	46
	Other Diseases of Heart	5	3	—	—	1	—	87	122	—	—	65	51	334
	Aneurysm	—	—	—	—	—	—	4	1	—	—	4	3	12
	Arterio-sclerosis and Other Diseases of Arteries ..	—	—	—	—	—	—	15	8	—	—	77	32	132
	Varicose Veins, including hæmorrhoids	—	—	—	—	—	—	65	1	—	—	80	1	147
	Other Diseases of Veins	1	—	—	—	—	—	14	1	—	—	22	1	39
	Diseases of Lymphatic System	88	2	—	—	2	—	23	2	2	—	30	5	154
	Abnormalities of Blood Pressure	2	—	—	—	—	—	70	3	—	—	32	7	114
	Other Diseases of Circulatory System	2	—	—	—	—	—	37	—	—	—	25	4	68
	TOTALS		136	20	1	1	3	1	617	424	3	1	536	395	2,138

DISEASES OF
RESPIRATORY
SYSTEM

Diseases of Nose and Larynx	25	—	—	—	1	—	28	—	1	—	63	2	120
Bronchitis	389	19	3	—	2	—	617	55	3	—	505	81	1,674
Bronchiectasis	11	—	—	—	—	—	19	—	—	—	11	7	48
Broncho-pneumonia	159	99	—	—	—	—	24	22	—	1	45	50	404
Lobar Pneumonia	248	33	—	—	1	—	191	108	2	1	127	75	787
Other Pneumonia	18	1	—	—	—	—	6	31	—	1	13	5	77
Empyema	13	2	—	—	1	—	15	4	—	—	12	4	51
Pleurisy	17	—	—	—	—	—	48	—	—	—	65	4	136
Pulmonary Embolism	1	—	—	—	—	—	1	2	—	—	10	1	15
Asthma	14	—	—	—	—	—	43	—	—	—	55	5	118
Other Diseases of Respiratory System	39	2	—	—	—	—	56	6	—	—	142	13	258
TOTALS	934	156	5	1	6	6	1,048	228	6	3	1,048	247	3,688

DISEASES OF
DIGESTIVE
SYSTEM

Diseases of Teeth and Gums	62	1	—	—	1	—	66	—	—	—	92	—	222
Vincent's Angina	1	—	—	—	—	—	6	—	—	—	1	—	8
Other Diseases of Tonsils (tonsillitis, etc.)	1,565	3	6	—	6	—	150	1	1	—	189	2	1,921
Other Diseases of Mouth, Pharynx, and Oesophagus	20	—	—	—	—	—	18	—	—	—	11	2	54
Ulcer of Stomach and Duodenum	—	—	—	—	—	—	208	21	1	—	233	16	479
Other Diseases of Stomach (excluding tumours)	20	1	3	—	—	—	170	5	—	—	153	6	358
Diarrhoea and Enteritis	146	29	1	—	13	—	31	1	2	—	29	2	254
Appendicitis	146	4	3	—	—	—	250	8	1	—	293	15	720
Hernia	29	1	—	—	1	—	178	9	—	—	151	3	378
Intestinal Obstruction	8	7	—	—	—	—	31	23	—	—	21	13	104
Constipation and Other Diseases of Intestine	97	4	1	—	—	—	154	5	—	1	202	6	470
Cirrhosis and Other Diseases of Liver, Diseases of Gall Bladder and of Pancreas	14	2	1	—	1	—	101	4	—	—	131	15	269
Peritonitis (non-tuberculous and without stated cause)	1	6	—	—	—	—	4	8	—	—	5	7	32
Fistula in Ano	—	—	—	—	—	—	15	—	—	—	9	—	24
Ischio Rectal Abscess	—	—	—	—	—	—	15	—	—	—	12	—	27
TOTALS	2,109	59	15	—	22	2	1,397	85	5	1	1,532	93	5,320

NON-VEREAL
DISEASES OF
GENITO-URINARY
SYSTEM

Acute Nephritis	31	3	—	—	2	—	12	—	—	—	10	2	60
Chronic Nephritis	3	—	—	—	1	—	17	11	1	—	32	13	78
Pyelitis (including peri-nephritic abscess)	15	—	—	—	—	—	59	1	—	—	74	4	153
Other Diseases of Kidney	10	—	1	—	—	—	81	51	1	—	86	19	249
Diseases of Bladder and Urethra	4	—	—	—	1	—	71	21	—	—	65	26	188
Diseases of Prostate	—	—	—	—	—	—	35	5	—	—	56	17	113
Other Diseases of Male Genital Organs	46	2	—	—	—	—	61	—	1	—	56	1	167
Diseases of Female Genital Organs	12	—	—	—	1	—	451	9	3	—	427	4	907
TOTALS	121	5	1	—	5	—	787	98	6	—	806	86	1,915

[illegible]

CONGENITAL MALFORMATIONS	Hydrocephalus and Spina Bifida and Meningocele ..	5	21	—	—	—	3	4	1	—	—	1	—	—	39
	Congenital Pyloric Stenosis ..	2	—	—	—	—	—	—	—	—	—	—	—	—	3
	Cleft Palate, Hare Lip ..	1	2	—	—	—	—	1	—	—	—	—	—	—	6
	Other Congenital Malformations ..	8	2	—	—	—	1	4	—	—	—	—	1	—	16
	TOTALS ..	16	25	—	—	—	4	9	1	—	—	1	—	—	64
DISEASES OF EARLY INFANCY	Atrophy, Debility, Marasmus, etc. ..	66	16	—	—	—	23	4	1	—	—	—	—	—	111
	Premature Birth ..	3	13	—	—	—	—	48	1	—	—	—	—	—	130
	Injury at Birth ..	1	—	—	—	—	1	6	—	—	—	—	—	—	8
	Other Diseases of Early Infancy ..	12	2	—	—	—	1	8	—	—	—	—	—	—	47
	TOTALS ..	82	31	—	—	—	25	66	2	—	—	—	—	—	296
VIOLENCE	Old Age, Senility, Senile Decay (not senile dementia) ..	—	—	—	—	—	—	—	115	200	—	—	—	—	560
	TOTALS ..	—	—	—	—	—	—	—	115	200	—	—	—	—	560
	Poisoning by Coal Gas or other Gas ..	2	—	—	—	—	—	—	10	—	—	5	—	—	17
	Food Poisoning ..	—	—	—	—	—	—	—	—	—	—	2	—	—	2
HEALTHY	Other Poisoning ..	4	—	—	—	—	—	—	3	1	—	5	—	—	13
	Cut Throat ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Drowning and Suffocation ..	—	—	—	—	—	—	—	2	—	—	1	—	—	3
	Electrical Injuries and Lightning ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Burns ..	42	3	2	—	—	—	—	22	5	—	—	—	—	—
	Scalds ..	115	3	—	—	—	1	—	16	34	—	44	8	—	127
	Other Accidents associated with Fracture ..	113	2	7	—	—	2	—	304	10	—	23	—	—	159
	Other Accidents without Fracture ..	200	4	15	—	—	2	—	355	1	—	337	41	—	845
	Other Forms of Violence ..	8	—	—	—	—	—	—	19	—	—	306	8	—	904
	TOTALS ..	484	12	24	—	—	5	—	731	51	3	734	59	—	42
	Ill-defined Diseases ..	196	3	—	—	—	1	—	242	—	—	91	—	—	2,112
	TOTALS ..	196	3	—	—	—	1	—	242	—	—	91	—	—	534
	Convalescence (i.e., transferred from other Hospital) ..	34	—	1	—	—	—	—	—	—	—	—	—	—	534
	TOTALS ..	34	—	1	—	—	—	—	—	—	—	—	—	—	—
	Healthy Mothers ..	—	—	68	—	—	—	—	2,448	—	—	2,149	—	—	35
	Healthy Infants ..	3	—	—	—	—	2,417	—	—	—	—	—	—	—	35
	Healthy (other than Mothers and Infants) ..	30	—	2	—	—	—	—	1	—	—	1	—	—	4,667
	TOTALS ..	33	—	70	—	—	2,417	—	2,449	—	—	2,099	—	—	4,509
	TOTALS ..	33	—	70	—	—	2,417	—	2,449	—	—	2,099	—	—	42
	TOTALS ..	33	—	70	—	—	2,417	—	2,449	—	—	2,099	—	—	9,218

(TABLE X. SUMMARY OF TABLE IX.)
Classification (in Disease Groups) of Discharges and Deaths in the General Hospitals, 1937.

Disease Group	Booth Hall Hospital			Crumpsall Hospital			Withington Hospital			Totals			
	Children under 16		Men and Women	Children under 16		Men and Women	Children under 16		Men and Women				
	Disch.	Died	Disch.	Died	Disch.	Died	Disch.	Died	Disch.		Died		
1. Infectious Disease	417	71	18	—	15	1	536	52	11	1	767	292	2,181
2. Cancer and Other Tumours	—	2	—	—	—	—	206	256	—	1	200	213	878
3. Rheumatism Diseases of Nutrition, etc.	310	7	—	—	—	—	506	14	2	—	516	26	1,381
4. Diseases of Blood and Blood-forming Organs	12	2	—	—	—	1	52	11	—	—	46	13	137
5. Chronic Poisoning	—	—	—	—	—	—	26	1	—	—	23	1	51
6. Diseases of Nervous System and Sense Organs	313	23	4	1	6	3	783	182	4	6	434	148	1,907
7. Diseases of Circulatory System	136	20	1	1	3	1	617	424	3	1	536	395	2,138
8. " Respiratory System	934	156	5	1	6	6	1,048	228	6	3	1,048	247	3,688
9. " Digestive System	*2,109	59	15	—	22	2	1,397	85	5	1	1,532	93	5,320
10. Non-Veneral Diseases of Genito-urinary System	121	5	1	—	5	—	787	98	6	—	806	86	1,915
11. Diseases of Pregnancy, Childbirth, and the Puerperal State	—	—	—	—	—	—	782	9	4	—	879	10	1,684
12. Diseases of Skin	711	14	4	—	7	1	634	30	4	—	648	18	2,071
13. Non-Tuberculous Diseases of Bones and Organs of Locomotion	71	3	—	—	—	—	86	2	1	—	113	5	281
14. Congenital Malformations	16	25	—	—	4	9	1	—	7	—	1	1	64
15. Diseases of Early Infancy	82	31	—	—	25	66	2	—	32	58	—	—	296
16. Old Age, Senility, and Senile Decay	—	—	—	—	—	—	115	200	—	—	117	128	560
17. Violence	484	12	24	3	5	—	731	51	6	3	734	59	2,112
18. Ill-defined Diseases	196	3	—	—	1	—	242	—	1	—	91	—	534
19. Convalescence	34	—	1	—	—	—	—	—	—	—	—	—	35
20. Healthy	33	—	70	—	2,417	—	2,449	—	2,099	—	2,150	—	9,218
GRAND TOTALS	5,979	433	143	6	2,516	90	11,000	1,643	2,191	74	10,641	1,735	56,451
	6,412	149	2,606	15,249	2,265	12,376	14,641	36,451					

TAF
CLASSIFICATION (IN DISEASE GROUPS) C
IN 1937 ACCORDING 7

Disease Group										0—5		6—10
1.	Infectious Disease	..	..	..	..	..	..	..	..	Discharged	287	87
										Died	54	
2.	Cancer and Other Tumours	..	..	..	..	..	..	..	..	Discharged	..	..
										Died .. ..	..
3.	Rheumatism, Diseases of Nutrition, etc.	..	..	..	..	..	..	..	..	Discharged	69	126
										Died	2	
4.	Diseases of Blood and Blood-forming Organs	..	..	..	..	..	..	..	..	Discharged	8	2
										Died	1	
5.	Chronic Poisoning	..	..	..	..	..	..	..	..	Discharged	..	..
										Died .. ..	..
6.	Diseases of Nervous System and Sense Organs	..	..	..	..	..	..	..	..	Discharged	173	79
										Died	18	
7.	Diseases of Circulatory System	..	..	..	..	..	..	..	..	Discharged	50	39
										Died	8	
8.	Diseases of Respiratory System	..	..	..	..	..	..	..	..	Discharged	692	147
										Died	153	
9.	Diseases of Digestive System	..	..	..	..	..	..	..	..	Discharged	842	894
										Died	51	
10.	Non-Venereal Diseases of Genito-urinary System	..	..	..	..	..	..	..	..	Discharged	55	34
										Died	4	
11.	Diseases of Pregnancy, Childbirth, and the Puerperal State	..	..	..	..	..	..	..	..	Discharged	..	..
										Died .. ..	..
12.	Diseases of Skin	..	..	..	..	..	..	..	..	Discharged	409	177
										Died	13	
13.	Non-Tuberculous Diseases of Bones and Organs of Locomotion	..	..	..	..	..	..	..	..	Discharged	13	17
										Died	1	
14.	Congenital Malformations	..	..	..	..	..	..	..	..	Discharged	8	5
										Died	25	
15.	Diseases of Early Infancy	..	..	..	..	..	..	..	..	Discharged	58	17
										Died	31	
16.	Old Age, Senility, and Senile Decay	..	..	..	..	..	..	..	..	Discharged	..	..
										Died .. ..	..
17.	Violence	..	..	..	..	..	..	..	..	Discharged	235	135
										Died	9	
18.	Ill-defined Diseases	..	..	..	..	..	..	..	..	Discharged	109	58
										Died	2	
19.	Convalescence	..	..	..	..	..	..	..	..	Discharged	11	18
										Died .. ..	..
20.	Healthy	..	..	..	..	..	..	..	..	Discharged	15	13
										Died .. ..	..
TOTALS										Discharged	3034	1848
										Died	372	

CHARGES AND DEATHS IN BOOTH HALL HOSPITAL
SELECTED LIFE PERIODS.

AGE GROUPS																
	16—25		26—40		41—50		51—60		61—70		71—80		Over 80		Totals	
9	14	..	1	..	1	..	..	..	..	..	2	..	..	..	435	71
1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	310	7
1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	12	2
.
3	1	..	1	..	2	..	..	..	..	1	..	..	..	..	317	24
5	..	1	..	..	..	..	..	..	..	1	..	..	..	..	137	21
1	..	..	3	..	..	..	..	2	..	..	..	..	..	..	939	157
5	11	..	1	..	1	..	..	1	..	1	1	..	..	..	2124	59
1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	122	5
..
..	3	..	1	..	..	..	..	..	..	..	..	..	..	..	715	14
1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	71	3
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	16	25
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	82	31
..
..	5	..	10	..	2	..	4	..	2	..	1	..	..	..	508	15
1	..	..	..	..	..	..	..	1	..	..	2	..	..	..	196	3
..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	35	..
..	24	..	46	..	..	..	..	..	..	..	..	..	..	..	103	..
31	59	1	64	..	6	..	4	1	5	1	5	3	..	..	6122	439
															6561	

CLASSIFICATION (IN DISEASE GROUPS) C
IN 1937, ACCORDING T

Disease Group										0—5	6—10
1.	Infectious Disease	..	..	..	..	..	..	..	Discharged	13	1
									Died .. ..	..
2.	Cancer and Other Tumours	..	..	..	..	..	..	..	Discharged	..	..
									Died .. ..	..
3.	Rheumatism, Diseases of Nutrition, etc.	..	..	..	..	..	..	..	Discharged	..	..
									Died .. ..	..
4.	Diseases of Blood and Blood-forming Organs	..	..	..	..	..	..	..	Discharged	..	..
									Died	1	
5.	Chronic Poisoning	..	..	..	..	..	..	..	Discharged	..	..
									Died .. ..	..
6.	Diseases of Nervous System and Sense Organs	..	..	..	..	..	..	..	Discharged	2	2
									Died	3	
7.	Diseases of Circulatory System	..	..	..	..	..	..	..	Discharged	1	..
									Died	1	
8.	Diseases of Respiratory System	..	..	..	..	..	..	..	Discharged	4	..
									Died	5	
9.	Diseases of Digestive System	..	..	..	..	..	..	..	Discharged	19	2
									Died	1	
10.	Non-Venereal Diseases of Genito-urinary System	..	..	..	..	..	..	..	Discharged	5	..
									Died .. ..	..
11.	Diseases of Pregnancy, Childbirth, and the Puerperal State	..	..	..	..	..	..	..	Discharged	..	..
									Died .. ..	..
12.	Diseases of Skin	..	..	..	..	..	..	..	Discharged	5	1
									Died .. ..	..
13.	Non-Tuberculous Diseases of Bones and Organs of Locomotion	..	..	..	..	..	..	..	Discharged	..	..
									Died .. ..	..
14.	Congenital Malformations	..	..	..	..	..	..	..	Discharged	4	..
									Died	9	
15.	Diseases of Early Infancy	..	..	..	..	..	..	..	Discharged	25	..
									Died	66	
16.	Old Age, Senility, and Senile Decay	..	..	..	..	..	..	..	Discharged	..	..
									Died .. ..	..
17.	Violence	..	..	..	..	..	..	..	Discharged	2	2
									Died .. ..	..
18.	Ill-defined Diseases	..	..	..	..	..	..	..	Discharged	1	..
									Died .. ..	..
19.	Convalescence	..	..	..	..	..	..	..	Discharged	..	..
									Died .. ..	..
20.	Healthy	..	..	..	..	..	..	..	Discharged	2417	..
									Died .. ..	..
TOTALS Discharged										2498	8
										86	

CHARGES AND DEATHS IN CRUMPSALL HOSPITAL
SELECTED LIFE PERIODS.

AGE GROUPS																
5	16—25		26—40		41—50		51—60		61—70		71—80		Over 80		Totals	
1	154	6	162	12	80	5	74	11	56	14	10	3	..	1	551	53
..	4	1	22	13	27	28	60	62	64	93	25	54	4	5	206	256
..	67	1	123	1	82	2	96	5	96	1	41	4	1	..	506	14
..	4	1	15	..	11	4	10	4	9	1	3	..	..	1	52	12
..	2	..	4	..	2	..	6	1	10	..	2	..	..	..	26	1
..	111	4	241	14	137	23	131	26	112	70	44	40	7	5	789	185
..	42	16	109	22	106	36	137	96	153	155	64	87	6	12	620	425
..	110	11	217	42	198	29	224	48	207	46	86	43	6	9	1054	234
1	292	6	431	11	245	17	207	12	160	27	58	10	4	2	1419	87
..	155	5	306	12	133	16	93	19	67	26	31	18	2	2	792	98
..	274	1	474	7	32	..	1	1	1	..	..	..	..	..	782	9
..	141	1	141	6	98	4	112	6	99	7	40	6	3	..	641	31
..	15	1	27	..	17	..	14	1	8	..	4	..	1	..	86	2
..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	5	9
..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	27	66
..	..	..	..	..	..	..	..	..	16	..	73	..	26	..	115	200
..	97	3	152	1	114	..	143	5	139	19	75	130	11	51	736	51
..	44	..	58	..	36	..	45	..	40	15	18	20	1	7	243	..
..
..	1067	..	1317	..	65	..	..	..	..	..	..	..	..	..	4866	..
..
2	2580	57	3801	141	1383	164	1353	297	1237	474	574	415	72	95	13516	1733
															15249	

TABLE
CLASSIFICATION (IN DISEASE GROUPS) OF
IN 1937, ACCORDING TO

Disease Group		0—5		6—10
1. Infectious Disease	Discharged	7	..	..
	Died .. ..	..	..	..
2. Cancer and Other Tumours	Discharged	..	1	..
	Died	1	..	..
3. Rheumatism, Diseases of Nutrition, etc.	Discharged	..	..	..
	Died .. ..	..	..	..
4. Diseases of Blood and Blood-forming Organs	Discharged	..	..	..
	Died .. ..	..	..	..
5. Chronic Poisoning	Discharged	..	..	..
	Died .. ..	..	..	..
6. Diseases of Nervous System and Sense Organs	Discharged	2	5	..
	Died	1	1	..
7. Diseases of Circulatory System	Discharged	3	3	..
	Died	3	1	..
8. Diseases of Respiratory System	Discharged	2	..	..
	Died .. ..	..	..	..
9. Diseases of Digestive System	Discharged	1	..	..
	Died	7	..	..
10. Non-Venereal Diseases of Genito-urinary System	Discharged	32	58	..
	Died .. ..	..	..	..
11. Diseases of Pregnancy, Childbirth, and the Puerperal State	Discharged	..	..	..
	Died	1	..	..
12. Diseases of Skin	Discharged	..	..	..
	Died .. ..	..	..	..
13. Non-Tuberculous Diseases of Bones and Organs of Locomotion	Discharged	1	1	2
	Died .. ..	..	1	1
14. Congenital Malformations	Discharged	..	..	..
	Died .. ..	..	..	..
15. Diseases of Early Infancy	Discharged	..	..	..
	Died .. ..	..	..	..
16. Old Age, Senility, and Senile Decay	Discharged	..	..	..
	Died .. ..	..	..	..
17. Violence	Discharged	2097	..	..
	Died .. ..	..	..	..
18. Ill-defined Diseases	Discharged	2157	70	3
	Died .. ..	..	..	..
19. Convalescence				
20. Healthy				
TOTALS				

CHARGES AND DEATHS IN WITHINGTON HOSPITAL SELECTED LIFE PERIODS.

AGE GROUPS																
15	16—25		26—40		41—50		51—60		61—70		71—80		Over 80		Totals	
	231		235		141		109		45		6		..		778	
1	60		78		62		55		24		13		..		293	
	2		21		41		54		55		25		2		200	
..	2		14		25		49		78		42		3		214	
	62		151		95		107		70		26		5		518	
..	1		1		2		3		11		6		2		26	
	4		15		7		7		10		3		..		46	
..	1		4		1		2		3		2		..		13	
	1		6		3		7		4		1		1		23	
..	..		..		..		1		..		..		..		1	
	65		120		78		65		70		35		1		438	
1	8		9		17		24		54		28		8		154	
	43		103		79		110		132		61		8		539	
..	9		25		40		85		129		91		16		396	
	131		268		160		194		200		82		13		1054	
..	8		34		46		50		58		42		9		250	
	358		492		272		218		128		57		7		1537	
..	6		17		13		23		21		12		1		94	
	158		334		115		93		63		37		6		812	
..	2		14		6		17		24		13		10		86	
	302		544		33		..		..		..		..		883	
..	1		8		1		..		..		..		..		10	
	160		191		88		90		76		39		4		652	
..	2		2		1		5		2		3		3		18	
	26		29		24		14		13		6		1		114	
..	..		3		..		..		1		1		..		5	
	1		..		..		..		..		..		..		8	
..	..		1		..		..		..		..		..		1	
	..		..		..		..		..		..		..		32	
..	..		..		..		..		..		..		..		58	
	..		..		..		2		20		62		33		117	
..	..		..		..		..		16		73		39		128	
	119		170		114		117		134		61		19		740	
1	..		8		1		8		15		18		9		62	
	15		24		17		13		18		4		..		92	
..	
	
..	
	880		1229		41		..		..		..		..		4249	
..	
3	2558	100	3932	218	1308	215	1200	322	1038	436	505	344	100	100	12832	1809
															14641	

TABLE

(Summary of Tables

TABLE XV.
SOURCES OF ADMISSION OF PATIENTS DISCHARGED
FROM OR DYING IN GENERAL HOSPITALS
DURING THE YEAR ENDED
31st DECEMBER, 1937.

(Excluding Births).

Source of Admission	Booth Hall Hospital	Crumpsall Hospital	Withington Hospital	Totals
District Medical Officer ..	390	2,204	944	3,538
General Practitioner ..	2,816	6,035	6,275	15,126
Voluntary Hospital... ..	1,358	1,103	2,130	4,591
*City Institution	161	448	140	749
*City Hospital	200	121	130	451
Other	†1,498	†2,795	†2,506	6,799
†Staff Cases	35	53	144	232
Maternity and Child Welfare Centres	27	29	5	61
Accident Ward	76	25	235	336
Totals	6,561	12,813	12,509	31,883

* Transfers.

† Includes Staff from Corporation establishments other than Public Health.

‡ At Booth Hall Hospital the classification "Other" includes cases sent in by Education Department and the Central Public Health Office. Maternity cases classified as "Other" at Withington and Crumpsall Hospitals.

CONVALESCENT HOME WORK.

The conditions under which the convalescent home work of the department is carried on have been described in previous reports. The following details refer to the work carried out by this section of the department in 1937—

HOSPITALS ADMINISTRATION SECTION.

Report relating to Persons recommended for Convalescent Home Treatment during the year ended 31st December, 1937.

Number on the books January 1st 137*

Number admitted January 1st to December 31st Adults 231
Children 527

Total 758

Number discharged January 1st to December 31st Adults 233
Children 475

Total 708

Number remaining on the books December 31st, 1937 187

Admissions			Discharges	
Adults	Children		Adults	Children
30	92	March quarter	25	81
51	110	June quarter	53	81
114	223	September quarter	108	178
36	102	December quarter	47	135
231	527		233	475

Summary of Admissions.

Class	No. of Patients	Name of home
Adults . . .	180	Southport Convalescent Hospital, Southport.
	3	Devonshire Royal Hospital, Buxton.
	39	Liverpool Convalescent Home, Woolton
	3	Lear Home of Recovery, West Kirby.
	6	Royal Alexandra Hospital, Rhyl.
Children . .	2	Blackburn and District Convalescent Home.
	431	Dr. Garrett Memorial Home, Conway.
	33	Children's Convalescent Home, West Kirby.
	4	Royal Alexandra Hospital, Rhyl.
	57	Rose Hill Convalescent Home, Manchester.
Total . .	758	

* Amended figure.

Summary of Discharges.

NAME OF HOME	To Home Improved	To own Homes Fit	To Booth Hall Hospital for Obser- vation	To Booth Hall Hospital for Final Examina- tions	To Monsall Hospital	Children Discharged Home on Demand
ADULTS—						
Southport Convalescent Hospital Southport	183	—	—	—	—	—
Liverpool Convalescent Home, Woolton	39	—	—	—	—	—
Devonshire Royal Hospital, Buxton	3	—	—	—	—	—
Lear Home of Recovery, West Kirby	4	—	—	—	—	—
Royal Alexandra Hospital, Rhyl	4	—	—	—	—	—
Total	233	—	—	—	—	—
Total—233.						
CHILDREN—						
Dr. Garrett Memorial Home, Conway	—	255	55	22	8	50
Children's Convalescent Home, West Kirby	—	34	—	1	—	—
Rose Hill Convalescent Home, Northenden	—	29	—	—	3	13
Royal Alexandra Hospital, Rhyl	—	3	—	—	—	—
Blackburn and District Con- valescent Home, St. Annes-on-Sea	—	2	—	—	—	—
Total	—	323	55	23	11	63
Total—475.						

Outfits of Clothing.

The amounts expended on the provision of clothing to enable patients to proceed to convalescent homes during the year ended 31st December, 1937, were as follows :—

Public Health Committee :—

	£	s.	d.	£	s.	d.
March quarter	33	14	2			
June quarter	63	2	1			
September quarter	151	18	6			
December quarter	138	16	11			
				387	11	8

Public Assistance Committee :—

	£	s.	d.	£	s.	d.
March quarter	59	1	9			
June quarter	65	3	6			
September quarter	144	0	4			
December quarter	82	17	11			
				351	3	6

Total	738	15	2
---------------	-----	----	---

In 1937, there were 231 adults and 527 children given convalescent treatment as against 276 adults and 545 children in 1936, showing a decrease in each case.

In 1937, the discharges showed 233 adults and 475 children, as against 261 adults and 556 children in 1936. A decrease is also noted here.

The amount of money expended on outfits of clothing during the year shows a decrease of £180 7s. 8d. on the amount expended in 1936. The Public Assistance Account shows a decrease of £38 1s. 2d. and the Public Health Account shows a decrease of £142 6s. 6d.

Since March 1st, 1937, arrangements have been made for patients to be admitted to the Rose Hill Convalescent Home from the districts.

Recommendations for adult patients to receive convalescent treatment are chiefly made by Crumpsall Hospital, Withington Hospital, and the District Medical Officers. The children's recommendations are received from Booth Hall Hospital, the Northern Hospital, St. Mary's Hospital, the Duchess of York Hospital, the Child Welfare Centres, and the District Medical Officers.

During the year, for various reasons, 25 adult recommendations were cancelled by the patients. Fourteen children's recommendations were cancelled by their parents.

A patient, aged 27 years, died at the Southport Convalescent Hospital. The cause of death was stated as (1) pulmonary infarct; (2) mitral stenosis. Another patient at the Southport Convalescent Hospital was seriously ill with a recurrent attack of bronchitis and asthma. He was removed by ambulance and re-admitted to the Crumpsall Hospital.

Patients suffering from infectious diseases at the Dr. Garrett Memorial Home, Conway, were transferred either to the Groesynydd Isolation Hospital, Conway, or to the Llandudno Isolation Hospital, except chickenpox cases, who were nursed in isolation at the Dr. Garrett Memorial Home, Monsall Hospital, Manchester, and the Llandudno Isolation Hospital. Patients suffering from infectious diseases at the Children's Convalescent Home, West Kirby, were transferred to the Clatterbridge Isolation Hospital, near Liverpool. Patients suffering from infectious diseases at Rose Hill Convalescent Home, Northenden, were transferred to Monsall Hospital.

District Medical Service.

There are 28 medical districts in the service and 28 district medical officers. At the end of 1937 there were 10 transferred district medical officers and 18 district medical officers holding temporary posts. During the year, negotiations for the reorganisation of the district medical

service on panel lines continued between the city and the representative bodies of the medical profession. These negotiations did not reach any definite conclusion, and are being continued during 1938. The actual work of the service calls for no special comment.

Public Vaccination.

The number of public vaccinators is 26, and there are 4 vaccination officers.

The percentage of infants successfully vaccinated in Manchester—51·57 per cent. in 1936—continues to be considerably higher than that for England and Wales as a whole. The percentages for each of the five years 1931 to 1935 were :—

Year	England and Wales	Manchester
	%	%
1931	39·0	51·70
1932	38·2	52·45
1933	37·0	52·17
1934	36·1	51·40
1935	35·4	52·17

The following is a summary of the return made to the Ministry of Health, of vaccinations for the year *1936 :—

	Total	Percentage
Number of successful vaccinations.. .. .	6,470	51·75
Number insusceptible of vaccination	25	0·20
Number of exemptions	3,845	30·76
Number died unvaccinated	731	5·85
Number not traceable : removed to other districts or postponed	1,431	11·44
Number of children born.. .. .	11,502	100·00

* Returns for vaccination are always for the year preceding the year covered by this report. This is unavoidable, since the period of four months from the date of birth is allowed for exemption purposes.

The scheme referred to in last year's report, for making the districts of the public vaccinators and the vaccination officers coincide with each other, and also with the registration districts of the city, was not implemented during the year 1937, although much time and work were spent on negotiations with the public vaccinators to secure their agreement to the changes which the scheme involves.

The negotiations were concluded successfully in all cases, and the scheme will be put into operation in 1938.

ABERGELE SANATORIUM.

REPORT FOR YEAR ENDED DECEMBER 31ST, 1937,

By DR. J. E. GEDDES, Medical Superintendent.

The available beds are allocated according to the age of the patient and the type of disease, as follows :—

Age	Type of Tubercle	Sex	Number of Beds
1—4	Bone and Joint Tuberculosis .. {	10 boys 10 girls	20
4—15	Ditto ditto .. {	37 boys 37 girls	74
1—4	Pulmonary tuberculosis, including tracheo-bronchial glands, peripheral glands, and abdominal tuberculosis {	10 boys 10 girls	20
4—15	Ditto ditto {	37 boys 37 girls	74
—	Admission Ward	—	11
.....			
Adults (Plas Uchaf)	Pulmonary Tuberculosis {	42 males 10 females	52
		Total available beds	251
	Isolation Ward	—	10

At the commencement of the year there were 241 patients in the sanatorium :—

49 in the adult section, and
192 in the children's section.

At the end of the year there were 245 patients in the sanatorium :—

51 in the adult section, and
194 in the children's section.

TABLE 2.

ANALYSIS ON ADMISSION OF CASES OF BONE AND JOINT TUBERCULOSIS.

	Hip Joint	Knee Joint	Ankle Joint	Spine	Other Bones	Multiple Areas
Advanced	4	1	..	2	1	..
Intermediate ..	4	1	1	..	1	..
Early	2	1	1	..	..	..
Totals	10	3	2	2	2	..

This classification is based on the extent of bone destruction as shown by the initial radiological examination. It does not take into account the degree of activity of the disease.

TABLE 3.
RESULT OF TREATMENT IN DISCHARGED PULMONARY CASES.

Duration of Residence		Under 3 months				3-6 months				6-12 months				Over 12 months				Totals	
Classification on Admission	Condition on Discharge	Adults		Children		Adults		Children		Adults		Children		Adults		Children		Adults	Children
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.		
T.B. Minus	Quiescent	..	..	..	..	2	..	..	..	..	..	2	..	1	1	9	3	3	1
	Improved	..	1	..	..	2	1	..	2	1	1	1	2	1	1	5	1	5	4
	Stationary	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..
	Worse	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Died	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	1	1
T.B. Plus Gr. 1	Quiescent	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	2
	Improved	..	..	..	..	2	..	..	..	1	..	..	1	..	1	..	..	3	1
	Stationary	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Worse	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..
	Died	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
T.B. Plus Gr. 2	Quiescent	..	..	..	..	..	..	..	..	1	..	..	..	2	1	..	..	3	1
	Improved	..	2	..	..	3	2	..	..	3	2	..	..	3	11	1	5	11	5
	Stationary	..	1	..	..	1	..	..	..	..	1	..	..	..	3	..	..	3	..
	Worse	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Died	..	1	..	..	1	..	1	..	2	..	..	1	2	..	..	6	..	2
T.B. Plus Gr. 3	Quiescent	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Improved	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Stationary	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Worse	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Died	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
TOTALS		5	2	..	..	11	3	..	3	8	..	3	5	10	8	17	6	34	13
		7		14		8		8		18		23		47		34		34	

This table excludes observation cases, and three patients who were in residence for a period of less than 28 days.

Duration of Residence		Under 3 months		3-6 months		6-12 months		Over 12 months		Totals	
Classification on Admission	Condition on Discharge	Children		Children		Children		Children		Children	
*Bones and Joints	Quiescent	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
	Improved	..	..	2	..	2	1	15	8	19	9
	Stationary	..	..	..	..	1	3	2	..	3	3
	Worse	..	..	..	..	..	..	..	2	1	..
	Died	..	..	..	..	..	..	1	2	..	2
Abdominal	Quiescent	..	..	..	..	..	..	1	1	1	1
	Improved	..	1	..	1	..	..	..	..	..	2
	Stationary	..	..	1	..	..	..	..	..	1	..
	Worse	..	..	..	..	..	..	..	..	..	..
	Died	..	..	..	..	..	..	..	..	..	..
Other Organs	Quiescent	..	..	..	..	..	..	..	..	..	..
	Improved	..	..	..	..	..	..	..	..	..	..
	Stationary	..	..	..	..	..	..	..	..	..	..
	Worse	..	..	..	..	..	..	..	..	..	..
	Died	..	..	..	..	..	..	..	..	..	..
Peripheral Glands	Quiescent	..	..	..	..	1	..	3	4	4	4
	Improved	..	..	..	..	..	1	..	..	..	1
	Stationary	..	1	..	..	..	..	..	..	..	1
	Worse	..	..	..	..	..	..	..	..	..	..
	Died	..	..	..	..	..	..	..	..	..	..
TOTALS		..	2	3	..	5	6	22	17	30	25
		2		3		11		39		55	

This table excludes one patient who was in residence for less than twenty-eight days.

* A complete analysis of the 40 cases of bone and joint tuberculosis discharged during the year is shown in Table 12.

TABLE 5.

The result of treatment in these 136 discharged cases (Tables 3 and 4) was as follows (Five observation, and four cases, who were in residence for less than 28 days, are excluded from this table.)

	Total Cases Discharged	Quiescent	Improved	Stationary	Worse	Died
Adults (pulmonary)	47	8 (17.0%)	29 (61.7%)	3 (6.4%)	1 (2.1%)	6 (12.8%)
Children (pulmonary)	34	18 (53.0%)	10 (29.4%)	1 (2.9%)	1 (2.9%)	4 (11.8%)
Children (non-pulmonary)	55	38 (69.0%)	9 (16.4%)	3 (5.5%)	2 (3.6%)	3 (5.5%)

The figures in brackets indicate the percentage of the total patients in each group discharged with their disease in the condition stated at the head of the column.

It is of interest to record that of the 34 children discharged in the pulmonary group 28, or 82.4 per cent., were either quiescent or improved on discharge, and of the 55 children discharged in the non-pulmonary group 47, or 85.4 per cent., were either quiescent or improved on discharge.

Of the 47 adult patients discharged 37, or 78.7 per cent., were either quiescent or improved on discharge.

The children who died were in residence for 160 days, 258 days, 277 days, 309 days, 420 days, 632 days, 1718 days, respectively.

The cause of death was :—

- (1) Pulmonary tuberculosis.
- (2) Pulmonary tuberculosis.
- (3) Pulmonary tuberculosis.
- (4) Pulmonary tuberculosis and uræmia.
- (5) Tuberculous disease of the hip joint : pyonephrosis and uræmia.
- (6) Tuberculous disease of the hip joint and meningitis.
- (7) Tuberculous disease of the knee joint and meningitis.

ADULT SECTION OF THE SANATORIUM.

In residence on 1st January, 1937	..	..	..	..	..	49
Admitted	..	..	..	..	..	51
Discharged	..	..	..	..	..	43
Died	..	..	..	..	..	6
In residence on 1st January, 1938	..	..	..	..	..	51

The more important aspects of general and special treatment have been reviewed in previous reports. No alteration of importance has been made during the present year. Special treatment adopted as an adjuvant to general treatment is summarised later in the report.

DURATION OF TREATMENT.

The following table shows the average duration of treatment from 1932 to 1937 :—

TABLE 6.

Duration of Treatment					
	Under 3 months	3—6 months	6—12 months	Over 12 months	Total Discharges
1932	25	42	15	15	97
1933	25	37	31	4	97
1934	17	29	21	12	79
1935	10	24	10	17	61
1936	14	15	18	11	58
1937	9	14	8	18	49

The average duration of treatment of patients discharged during 1937 was 297 days. The duration of treatment has been gradually extended since 1932 and has been reflected by the improved condition of patients on discharge. The immediate effect has thus been demonstrated but the ultimate result of this longer period of treatment can only be estimated after the lapse of several years.

Handicraft Centre.

The construction and alteration of splints have given constant work throughout the year. A list of the more important splints made is appended :—

Abergele frames for the treatment of hip joint tuberculosis	10
Supports for plaster shells	8
Celluloid jackets	8
Pattens (special)	9
Liston splints.. .. .	12

SPECIAL TREATMENT.

Pneumothorax.

Successful inductions	3
Unsuccessful inductions	2
Refills	172
Air replacement of pleural effusion	4

Gold Salts.

Crisalbine has been used alone or in conjunction with artificial pneumothorax in 16 cases.

X-RAY WORK.

The following table shows the number of radiograms taken during the year :—

Lungs (antero-posterior)	115
Bone and joint	20
	—
Radiograms	135
	—
Pulmonary Radioscopy	484

A pulmonary radiogram is taken of each patient on admission and thereafter the patient is screened at intervals of six weeks.

LABORATORY WORK.

A list is appended of specimens examined and other work done in the laboratory during the year :—

Sputum—Ordinary examination (Ziehl-Neelsen)	464
„ Concentration (Pottenger)	71
„ Inoculation (Lowenstein-Jensen medium) ..	41
Pleural fluid examinations	3
Fæces (examination for Tubercle Bacilli)	1
	—
	<u>580</u>

The laboratory work will be extended during 1938 by the provision of facilities for animal inoculation tests.

RESULTS OF TREATMENT.

Weight Records.

The following table shows the weight records of patients discharged during the year. The records show in a general way the response made by these patients to the regimen of treatment :—

TABLE 7.

Total Discharges	Gain in Weight				Stationary	Loss in Weight
	1—6 lbs.	7—13lbs.	14—19 lbs.	20 lbs. & over		1—6 lbs.
43	8 (18·4%)	21 (48·8%)	7 (16·4%)	1 (2·4%)	3 (7·0%)	3 (7·0%)

The table shows that of 43 patients discharged during the year 37, or 86·0 per cent., gained in weight, and 6, or 14·0 per cent., were either tationary or lost weight.

Patients Discharged as “Quiescent” or “Improved.”

The duration of treatment depends on the response of the individual patient. On discharge it is desired that the general condition of the patient should be satisfactory, that the temperature and pulse records should be within normal limits, and that the clinical signs and the result of radiological and other ancillary examinations denote inactive disease. In the case of 37, or 78 per cent., of the patients discharged during the year these postulates have been attained.

GENERAL NOTES.

Library.

The library, opened during 1935, has been a conspicuous success. During the year sixty volumes have been added. The library now consists of four hundred volumes, and books are issued daily to bed patients, and twice a week to ambulant patients.

Rest Shelter.

A rest shelter was blown over and destroyed during the winter of 1936, and was replaced during the year. The new shelter is constructed to allow of the patients resting in the open during inclement weather. The remaining four shelters, which are not in a good state of repair, will be replaced at regular intervals by a similar type of shelter.

Sawmill.

The sawmill was erected in 1915 on a site immediately behind the adult section of the sanatorium. This position is unsatisfactory and necessitates the haulage of timber over roads with a gradient which makes haulage difficult and time-consuming. It is proposed in the near future to re-erect the sawmill in a field near to the kitchen garden.

Religious Services.

The Rev. H. R. Hughes, M.A., Rural Dean of Abergele, and the Rev. Father W. Cubley of Rhyl, and ministers from the Nonconformist churches have held regular services throughout the year. These services have been greatly appreciated by the staff and patients. I desire to record our appreciation of this work.

CHILDREN'S SECTION OF THE SANATORIUM, 1931-1937

The children's section of the sanatorium was opened in June, 1931, and during the period of six and a half years 500 children have been discharged. The result of treatment in these children is shown in the following tables :—

TABLE 8.

	No. of Cases Discharged	Quiescent	Improved	Stationary	Worse	Died
Pulmonary .	223	131 (59·5%)	68 (30·3%)	6 (2·3%)	2 (0·8%)	16 (7·1%)
Non- pulmonary	277	207 (74·73%)	37 (13·35%)	16 (5·79%)	4 (1·45%)	13 (4·68%)
Total	500	338 (67·6%)	105 (21·0%)	22 (4·4%)	6 (1·2%)	29 (5·8%)

The figures in brackets indicate the percentage of the total patients in each group discharged with their disease in the condition stated at the head of the column. Of 500 children discharged 443, or 88·6 per cent., were either quiescent or improved on discharge.

Of the 223 pulmonary cases 89·8 per cent. and of the 277 non-pulmonary cases 88·1 per cent. were quiescent or improved on discharge.

The terms "quiescent" and "improved" are used because it is impracticable to adopt the classification "cured," but in each of these 443 children discharged as "quiescent" or "improved" there was an absence of all clinical signs of activity of the disease. The final verdict will only be passed after they have been under dispensary supervision for a requisite period.

CHILDREN'S SECTION, 1937.

In residence on 1st January, 1937 ..	192
Admitted	93
Discharged	84
Died	7
In residence on 1st January, 1938 ..	194

GENERAL TREATMENT.

Non-pulmonary Tuberculosis.

Local treatment without concurrent general treatment is most likely to be productive of bad results. Heliotherapy is an essential factor in the treatment of non-pulmonary tuberculosis. The sunshine hours, the rainfall, and the temperature constitute the more important climatic features from the physiological aspect. The sunshine hours, rainfall, and temperature for 1937 for North Wales and Manchester are appended for comparison :—

	Sunshine Hours		Rainfall in Inches		Mean Temperature	
	North Wales	Man- chester	North Wales	Man- chester	North Wales	Man- chester
January	43·1	5·9	1·69	2·79	43·1	42·5
February	53·6	24·5	4·24	5·24	42·7	42·2
March	108·2	61·6	1·84	1·31	39·2	39·4
April	120·4	73·3	2·50	2·64	48·5	49·8
May	204·9	121·6	2·13	2·14	53·4	55·0
June	170·0	105·4	1·43	1·51	56·7	59·2
July	150·6	79·7	1·04	2·13	61·1	61·4
August	172·9	148·5	1·45	2·69	61·9	64·1
September	138·9	96·1	2·18	1·11	57·3	58·1
October	82·9	45·0	2·23	1·67	51·1	51·4
November	60·5	20·9	1·57	2·14	43·8	42·9
December	42·3	9·7	3·21	2·10	39·7	39·3
Totals	1348·3	792·2	25·51	27·47	49·9 Average	50·4 Average

(We are indebted to the Medical Officer of Health, Rhyl, for the North Wales records.)

The following table shows the weight records of the children discharged during the year. These records show in a general way the response made by the children to the regimen of treatment:—

TABLE 9.

Total Discharges	Gain in Weight				Stationary	Loss in Weight	
	1—6 lbs.	7—13 lbs.	14—19 lbs.	20 lbs. & over		1—6 lbs.	7—14 lbs.
84	10 (11.7%)	16 (19.0%)	17 (20.6%)	35 (41.6%)	6 (7.1%)	—	—

The figures in brackets indicate the percentage of the total children discharged with a weight record as stated at the head of each column.

The table shows that of 84 children discharged 78, or 93 per cent., gained in weight, and of this number 52, or 62.0 per cent., gained over 14 pounds; 6, or 7.1 per cent., did not gain weight.

LOCAL TREATMENT.

Non-Pulmonary Tuberculosis.

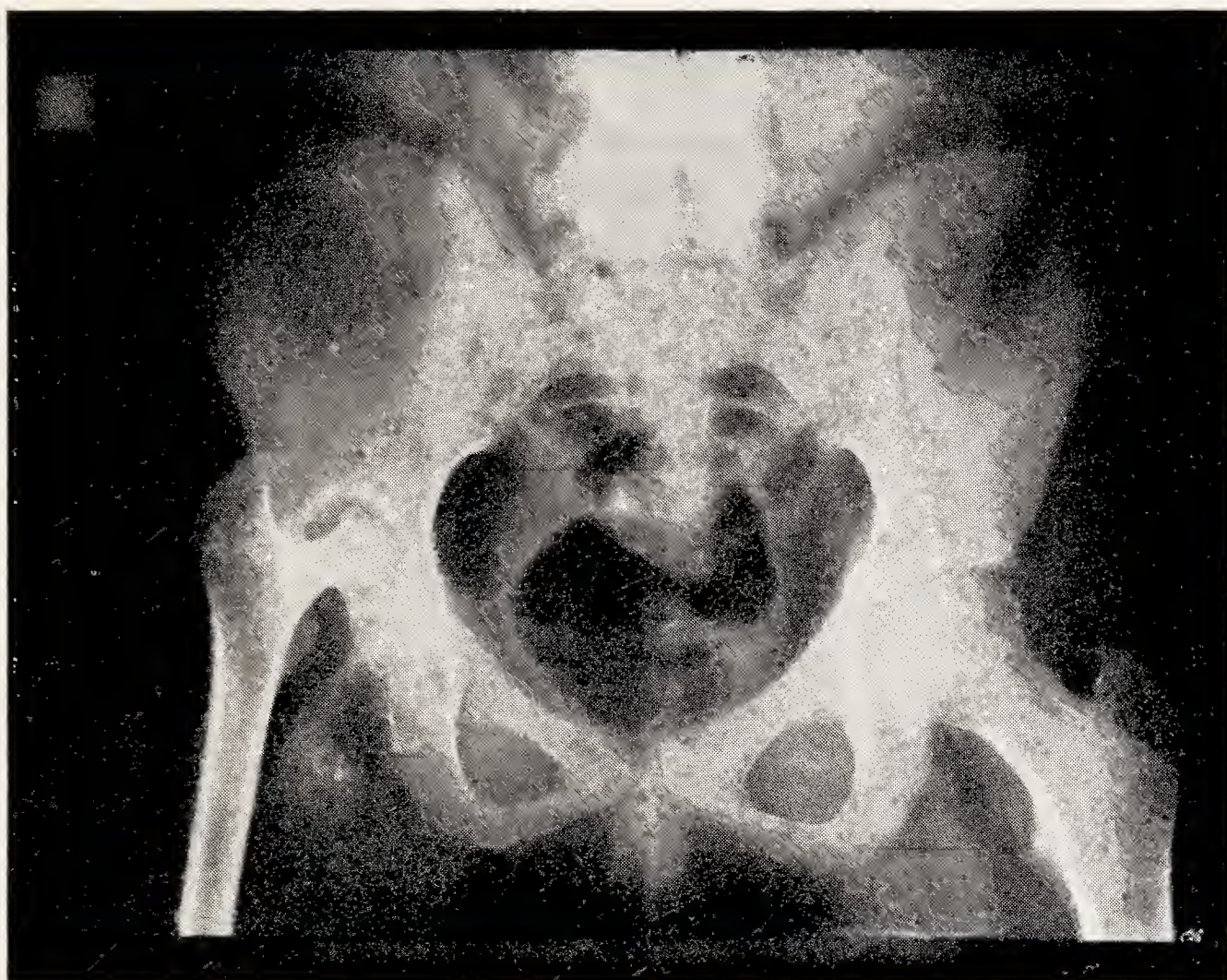
Reference has been made in previous reports to the methods used in the treatment of bone and joint tuberculosis and splints devised for the treatment of disease of the hip joint and spinal column have been described. These splints are in regular use and have proved to be effective.

The method of application of plaster of paris splints described in a previous report by the use of swabs has been continued.

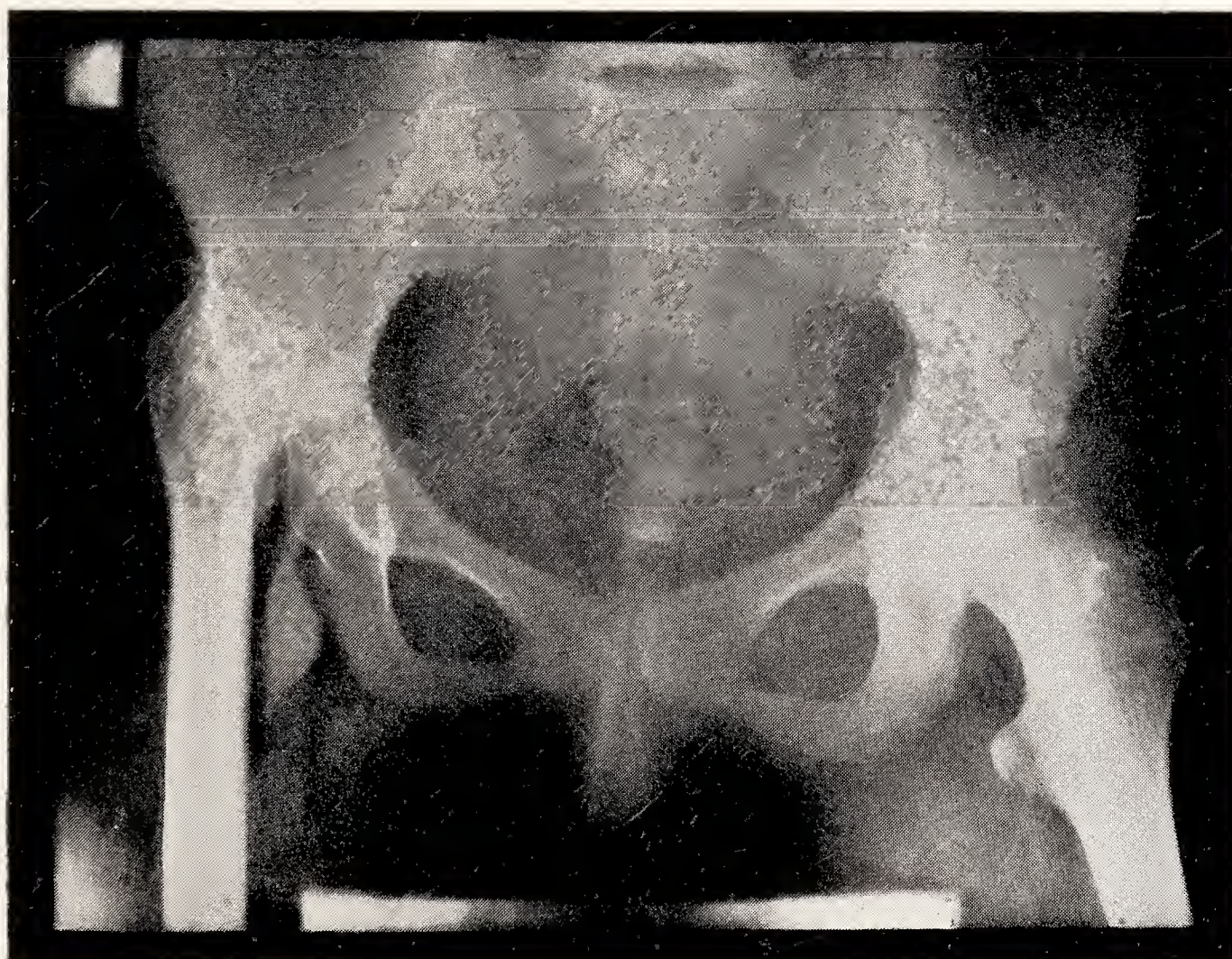
Hip Joint Tuberculosis.

The objective of treatment in hip joint tuberculosis is to secure arrest of the disease with firm ankylosis in a position which will ensure satisfactory ambulation. Free mobility of the joint is a comparatively infrequent result and is largely confined to cases where the disease is localised to the neck of the femur, or to the synovial membrane. In the majority of cases ankylosis is the final result, and to ensure a stable ankylosis is the end to which treatment is directed. Tuberculous disease of bone is destructive and re-ossification during the stage of resolution is rarely complete. This incomplete re-ossification is demonstrated in the fibrous and unstable ankylosis which results from treatment in a number of cases. A permanently "safe" joint has not been achieved in these cases, and stabilisation by operation is essential. Arthrodesis may be intra or extra articular, and it is of importance to delay operation until there is definite radiological evidence of re-ossification. An intra-articular arthrodesis has been performed by Mr. Telford in nine cases. The graft in eight cases was taken from the great trochanter, and in one from the tibia. The results have been good, and in eight cases an efficient bony ankylosis was obtained.

The effect of this operation is illustrated in the following radiograms :—



Joint before operation.
Unstable joint with small range of ineffectual movement.



Joint after operation.
Good bony ankylosis.

I desire to record the very great advantage derived from the monthly visits of Mr. E. D. Telford, Consulting Surgeon to the Sanatorium.

MASSAGE DEPARTMENT.

Classes for general exercises are held daily and special remedial exercises for ambulant cases of bone disease are given twice weekly in the gymnasium. A system of remedial exercises, massage, and electro-medical treatment for children confined to bed has been put into practice.

The end results in the treatment of bone and joint tuberculosis must be judged by the ability of the child to walk. The condition of the diseased joint is not the sole factor. The stability of healthy joints and tone of the general musculature, if good, are the ancillary factors which will furnish a satisfactory conclusion to treatment.

The results of treatment in respect of bone and joint cases discharged during the year are shown in Table 12, in which particular reference is made to the ambulatory efficiency.

A summary of work carried out in the department is shown below :—

Number of ambulant children who attended classes	
for general exercises.. .. .	53
Number of bedfast children who received individual	
massage and exercises	42
Number of children who received electro-medical	
treatment	12
Number of children who underwent table exercises..	5

Table Exercises.—The exercises referred to as “table exercises” are devised particularly for pre-ambulant cases of spinal tuberculosis. The exercises are given on a special table and have as their objective the improvement of the muscles of the trunk. The developed muscular system provides the child with a solid muscular corset, which plays an important part in maintaining the correction obtained and reducing the tendency to secondary spinal deformities.

Photography.

Photographic records are now taken as a routine of all patients on admission and on discharge. This work is undertaken by the massage sister, and during the year 220 photographs were taken.

LOCATION OF DISEASE	Number of discharges	Sound Ankylosis	Ankylosis not complete but position good	Free mobility of joint	Small spinal Gibbosity with efficient compensatory spinal curves	Large Gibbosity with efficient compensatory spinal curves	Ambulation			REMARKS
							Satisfactory	Poor	Not tested	
Hip joint	1	—	—	+	—	—	+	—	—	I.
	5	—	—	+	—	—	+	—	—	Q.
	5	+	—	—	—	—	+	—	—	Q.
	1	+	—	—	—	—	—	+	—	Q.
	1	—	+	—	—	—	—	—	+	I.—Treatment not completed, transferred to Wrightington Hospital.
	1	—	+	—	—	—	+	—	—	I.
	1	—	—	—	—	—	+	—	—	Q.
	2	—	—	—	—	—	—	—	—	D. } Pyonephrosis and uræmia. D. } Tuberculous meningitis.
Knee joint	3	—	+	—	—	—	+	—	—	Q.
	1	+	—	—	—	—	+	—	—	Q.
	1	—	—	+	—	—	—	—	+	I.—Treatment not completed.
	1	—	—	+	—	—	+	—	—	Q.
	1	—	—	—	—	—	—	—	+	W.—Primary amentia. In residence 185 days. Transferred to Booth Hall Hospital.
	1	—	—	—	—	—	—	—	—	D.—Meningitis.
	5	—	—	—	+	—	+	—	—	Q.
	1	—	—	—	—	+	—	—	+	W.—Complication of pulmonary tuberculosis. W.—Sinus formation.
Spine	1	+	—	—	+	—	+	—	—	I.
	3	—	+	—	—	—	++	—	—	Q.
	2	—	—	+	—	—	++	—	—	Q.
	1	—	—	+	—	—	+	—	—	Q.
	1	—	—	—	—	—	+	—	—	Q.
	1	—	—	—	—	—	—	—	—	Q.
	2	—	—	—	—	—	++	—	—	I.
	1	—	—	—	—	—	++	—	—	Q.

“Satisfactory” indicates that the ability to walk is such as to meet effectively all the ordinary requirements of daily life.

SPECIAL TREATMENT.

*Pulmonary Tuberculosis.**Gold Salt Therapy.*

Crisalbine or myocrisin was administered in 6 cases.

The number of pulmonary radiograms taken during the year was 176 pulmonary (antero-posterior and oblique).

The following table shows the radiological findings in 23 of the 33 T.B. minus children admitted during the year :—

TABLE 13.

Tracheo-bronchial glands	..	..	..	..	..	..	10
Primary pulmonary complex	..	..	..	..	..	..	5
Infiltration of lung parenchyma	..	..	..	..	..	..	6
Pleurisy	..	..	..	..	..	..	2
Total							<u>23</u>

Laboratory Work.

A list is appended of the specimens examined in the laboratory during the year :—

	Children	Staff
Pathological fluid examinations.. .. .	2	—
Sputum—Ordinary examination (Ziehl-Neelsen)	280	7
Sputum—Concentration (Pottenger)	130	—
Urine—Ordinary	17	99
Blood counts	8	—
Inoculation—(Lowenstein-Jensen medium)—		
(1) Sputum	10	—
(2) Gastric contents	45	—
(3) Pleural fluid	1	—
(4) Fæces	4	—
(5) Urine.. .. .	4	—
(6) Pus	15	—
(7) Cerebro-spinal fluid	2	—
Totals	<u>518</u>	<u>106</u>

The work of the laboratory will be extended during 1938 by the provision of facilities for animal inoculation tests. The additional laboratory facilities will allow of the “typing” of tubercle bacilli isolated from different specimens. The determination of the percentage of infections caused by the human and bovine varieties of the bacillus in the children admitted to the sanatorium is work of great practical importance.

These additional facilities will also be of value in the routine work of the laboratory and will allow of a more exact examination of specimens in which difficulty has been experienced in isolating the tubercle bacilli.

The scheme which will be introduced during 1938 represents only a portion of the full scheme.

Immunisation.

Children admitted during the year, with the exception of cases of active pulmonary tuberculosis, have been immunised against diphtheria. Toxoid-antitoxin floccules (T.A.F.) were used. Children over ten are Schick tested before immunisation. The immunisation of children on admission has been adopted as a routine.

Dental Treatment.

The dental surgeon (Mr. A. Smith, L.D.S.) visits the sanatorium once a fortnight, and in addition to the work detailed below he instructs the children at regular intervals on the proper care of the teeth.

The following table shows the condition of the teeth of children admitted during the year.

TABLE 14.

Age Group	All Teeth in Good Condition	One to Four Defective Teeth	Over Four Defective Teeth
1—6	15	6	1
7—15	25	41	5
Totals	40	47	6

Summary of dental work performed during the year:—

Visits	.. .. .	44
Extractions..	.. .. .	372
Fillings	.. .. .	172
Scalings	.. .. .	19
Dressings	.. .. .	15

The figures in the Summary include dental treatment for adult patients.

STAFF.

During the year Dr W. A. Murray was appointed to the position of Medical Superintendent of the Glenafton Sanatorium, Ayrshire.

Dr. Murray had been Deputy Medical Superintendent from June, 1931, and at the date of his resignation the House Sub-Committee passed the following resolution: "That, whilst the resignation of Dr. W. A. Murray is a matter of much regret, this Sub-Committee welcomes the opportunity of expressing its appreciation of his services so ably rendered as Deputy Medical Superintendent of Abergele Sanatorium, and especially of his social work amongst the patients and staff of the sanatorium as well as amongst the residents in the district, and it is the sincere wish of the Sub-Committee that in his new sphere of activities he will meet with continued success." The resolution will be fully endorsed by all who had the pleasure of working with Dr. Murray during his period of service at Abergele Sanatorium.

NURSING STAFF.

Miss E. J. Knowles, Matron.

Great difficulty has again been experienced in the recruitment of staff and probationer nurses. The shortage of staff has greatly increased the work and responsibility of the Matron (Miss E. J. Knowles). I again have great pleasure in recording the very able manner in which over the year she has allocated the reduced staff to the various wards and departments and thereby ensured the maximum efficiency in circumstances of very considerable difficulty.

SCHOOL.

Miss M. C. T. Evans, Head Mistress

Staff: Headmistress; Seven assistant teachers.

Statistics.

Number on school register on 1st January, 1937	183
Admitted	86
Discharged	78
Number on school register on 31st December, 1937	191

The general organisation and curriculum have been described in detail in previous reports. No alteration of any consequence has been made during the year. The curriculum is comprehensive and the ancillary activities are so varied that the child is enabled to share in most of the interests which would normally be his in a home environment.

The work of the school is supervised by Mr. W. T. Stevenson, Chief Inspector of Schools (Education Committee, Manchester), and his staff.

The school is now an approved centre for the Manchester Elementary School Scholarship examination.

The Library.

There are 360 books in the library and it is open twice a week. The average number of books issued at each distribution is 143. In addition there is a collection of reference books for the use of the staff and for any children engaged in special study.

Films.

Films of personal hygiene, the home industries, travel and adventure, have been shown in the wards throughout the winter months.

Lectures and demonstrations by visitors are encouraged, and several lectures have been given during the year.

Extraneous Activities.

The Scout, Guide, Cub, and Brownie Companies have had a very good year. The average number of children in the four sections is 138. Tests, proficiency badges, competitions, visits to local rallies and correspondence with other companies provide the children with more friends, new interests and ideals, and a stronger understanding of social service. Camping is an important feature of this work, and a permanent camp site on the estate helps the general organisation considerably.

FARM AND GARDEN.

The farm and forest work is controlled by Mr. W. Bell.

The farm estate consists of Pen-yr-allt, Ysgeiriallt, and Gwreiddyn.

The farm has been visited and the dairy herd examined at intervals of a fortnight by the Veterinary Officer (Mr. R. C. Locke).

The work of the farm is concerned chiefly with the supply of milk and late potatoes for the sanatorium. Other crops produced on the farm are grown with the object of feeding the livestock maintained.

The number of cows in milk is maintained at 40, but with heifers, yearling animals, and calves the number of cattle averages 80.

The activities of the pig farm are ancillary to the main work of the farm, and are of importance as they afford an economical method for the disposal of hospital swill.

The following table shows the result of the bacteriological examination of milk samples taken during the year. The standard required under

the terms of the Milk (Special Designation) Order for 1923 for certified milk is also shown for the purpose of comparison :—

TABLE 15.

Certified Milk	Maximum number of bacilli per cubic centimetre, 30,000	Coliform bacilli must be absent in $\frac{1}{10}$ th cubic centimetre		
Abergele Milk	Bacilli per cubic centimetre	Coliform bacillus in $\frac{1}{10}$ th cubic centimetre	Methylene blue test	Tubercle Bacilli
Months				
January	2,050	Absent	—	Absent.
February	1,820	„	—	„
March	1,847	„	—	„
April	—	—	Satisfactory ..	„
May	—	—	„ ..	„
June	—	—	„ ..	„
July	—	—	„ ..	„
August	—	—	„ ..	„
September	—	—	„ ..	„
October	4,600	„	„ ..	„
November	3,200	„	„ ..	„
December	3,500	„	„ ..	„

From April until September the methylene blue test only was performed, but during September, 1937, the House Sub-Committee requested that a general bacteriological count and methylene blue test should be made in future examinations of milk, and this was commenced when the October samples were taken.

Provender Store.

A provender store was erected during the year and effective storage facilities for provender provided.

The accommodation for heifers is not satisfactory and the House Sub-Committee considered a plan for the provision of a shippon at Pen-yr-allt Farm. The erection of the shippon has, however, been delayed on account of the financial stringency.

The quantity and approximate value of transfers from the farm during the year were as follows :—

Milk	27,621 gallons.
Potatoes	15 tons.
Veal	717 $\frac{1}{4}$ lb.
Turnips	672 lb,
Approximate value of transfers, £2340.	

Afforestation.

In pursuance of the scheme for the further afforestation of the estate felling operations were completed in the Brynlan Valley plantation. This plantation has been cleared and will be replanted during 1938. At the end of the year three plantations of approximately six acres remained unplanted.

Kitchen Garden.

The work of the kitchen garden and of the grounds of the sanatorium is under the control of Mr. W. Rawson.

The value and amount of transfers from the garden is shown below. The value of transfers for 1936 was £558.

Apples	6,494 lb	Herbs	881 bunches.
Beet	900 lb.	Onions.. .. .	1,174 lb.
Beans—French	645 lb.	Parsnips	674 lb.
Beans—Broad	1,140 lb.	Peas	1,359 lb.
Blackcurrants	136 lb.	Pears	40 lb.
Brocoli and		Potatoes	15,232 lb.
Cauliflowers	263 doz.	Radishes	67 lb.
Celery	81 doz.	Rhubarb	1,450 lb.
Cucumbers	204 doz.	Sprouts	2,278 lb.
Cabbages—Savoy	1,340 doz.	Tomatoes	969 lb.
Gooseberries	471 lb.	Raspberries	183 lb.
Kale (Greens)	1,534 lb.	Turnips	390 lb.
Leeks	858 lb.		
Lettuce	232 doz.		
Marrows	80 lb.		

Approximate value of transfers £506

BAGULEY SANATORIUM.

BY DR. H. G. TRAYER, MEDICAL SUPERINTENDENT.

The number of available beds was (average) 335.

The number of patients admitted was 540, the daily average number of beds occupied being 329·64.

The following table gives the number of admissions, discharges, etc. for the year 1937, compared with the previous four years :—

	1933	1934	1935	1936	1937
Number of patients :—					
In hospital, 1st January	311	307	330	320	318
Admitted during the year	549	641	583	511	540
Discharged during the year ..	429	470	477	404	422
Died during the year	124	148	116	109	107
Total treated during the year ..	860	948	913	831	858
Remaining in hospital, 31st Dec.	307	330	320	318	329
Daily average number of beds occupied	326·9	326·67	334·37	330·92	329·64
Average length of stay of patients discharged :—					
Males (days)	157·42	176·57	165·75	178·76	187·01
Females „	216·95	248·2	184·36	219·4	245·37
Average length of time in hospital of fatal cases :—					
Males (days)	230·26	287·38	276·74	282·88	289·44
Females „	194·13	235·75	322·39	374·19	338·78
Case mortality	14·41	15·61	12·71	13·12	12·7

Cases admitted from the districts of the Bucklow Joint Hospital Board are included in all totals given in this report. The details of such cases are :—

On January 1st, there were two patients in the Sanatorium ; ten patients were admitted during the period, six patients were discharged, and one died ; five patients remained in the hospital on December 31st.

Pathological Laboratory Report:—

Number of specimens of sputum examined	.. ..	2,179
Number of specimens found to be positive	.. ..	956
Number of specimens found to be negative	. ..	1,223

Other examinations :—

	Number	Result	
		Positive	Negative
Special examination of urine ..	3	1	2
Pleural effusion	13	1	12
Pus	1	—	1

During the year a large number of special examinations were carried out by the Public Health Laboratory.

Blood Sedimentations.

There is no doubt of the great value that this test is proving, particularly in estimating the progress of a patient and the result of special forms of treatment. The number of tests made during the year was 1,136, which is fifty per cent. increase over the previous year, and is very praiseworthy taking into account the very inadequate laboratory accommodation that is available.

X-Ray Report.

Number of patients screened.. .. .	1,601
Number of skiagrams taken	876

Dental Report.

Number of attendances	498
Extractions.. .. .	461
Fillings	13
Scraping and cleaning	8
Dentures	7
Repairs and adjustments to dentures	11

The dentist has also paid numerous visits to the wards for the purpose of examining the mouths of bed-patients.

RETURN SHOWING THE IMMEDIATE RESULTS OF TREATMENT OF PATIENTS SUFFERING FROM PULMONARY TUBERCULOSIS, AND OF OBSERVATION OF DOUBTFUL CASES DISCHARGED DURING THE YEAR.

Classification on Admission	Age at Discharge	Condition on Discharge	Duration of Stay								Total
			Under 3 months		3—6 months		6—12 months		More than 12 months		
			M.	F.	M.	F.	M.	F.	M.	F.	
CLASS T.B. MINUS	Ages 15—24	Quiescent ..	2	..	..	..	I	..	2	..	5
		Improved ..	7	4	I	2	..	..	..	..	14
		Stationary ..	2	6	..	..	I	..	..	..	9
		Worse .. ..	..	..	..	I	..	..	..	..	I
		Died .. ..	..	..	..	..	..	..	..	..	..
	Ages 25—34	Quiescent ..	..	..	I	..	..	I	..	..	2
		Improved ..	3	3	3	I	2	1	..	I	14
		Stationary ..	4	2	..	..	..	..	..	..	6
		Worse .. ..	..	..	..	..	..	..	..	..	..
		Died .. ..	..	..	..	..	..	..	..	..	..
	Ages 35—44	Quiescent ..	I	..	..	..	..	..	..	..	I
		Improved ..	3	2	5	I	..	..	I	..	12
		Stationary ..	4	I	..	I	I	..	..	..	7
		Worse	2	..	..	..	..	..	..	..	2
		Died .. ..	..	..	..	..	..	..	..	..	..
	Ages 45—54	Quiescent ..	I	..	..	..	..	..	..	..	I
		Improved ..	3	I	2	..	..	..	..	..	6
		Stationary ..	I	..	..	I	..	..	..	..	2
		Worse .. ..	..	..	..	..	..	..	..	..	..
		Died	I	..	..	..	..	..	..	..	I
	Ages 55 and over	Quiescent ..	I	I	..	..	..	..	..	..	2
		Improved ..	2	..	..	..	..	..	I	..	3
		Stationary ..	..	..	..	..	..	..	..	..	..
		Worse	I	..	..	..	..	..	..	..	I
		Died .. ..	..	..	I	..	..	..	I	..	2

[illegible]

Classification on Admission	Age at Discharge	Condition on Discharge	Duration of Stay								Total	Positive Sputum on Admission— Negative on Discharge
			Under 3 months		3—6 months		6—12 months		More than 12 months			
			M.	F.	M.	F.	M.	F.	M.	F.		
CLASS T.B. PLUS, GROUP II.	Ages 15—24	Quiescent	1	1	..	2	4	21
		Improved ..	3	5	1	4	1	5	8	7	34	
		Stationary ..	3	2	2	3	..	1	1	1	13	
		Worse	3	1	2	1	1	..	2	2	12	
		Died	2	4	1	2	..	6	2	2	19	
	Ages 25—34	Quiescent ..	1	1	2	4	25
		Improved ..	10	4	10	5	7	4	6	2	48	
		Stationary ..	11	2	1	2	..	..	5	5	26
		Worse	1	1	..	2	..	1	2	..	7	
		Died	2	..	1	1	1	2	3	3	13	
	Ages 35—44	Quiescent ..	1	1	18
		Improved ..	8	1	5	4	6	4	1	1	30	
		Stationary ..	12	2	4	..	1	..	..	1	20
		Worse .. ..	..	..	1	..	..	..	..	..	1
		Died	1	1	3	1	2	..	..	2	10
	Ages 45—54	Quiescent	1	1	12
		Improved ..	6	1	5	1	3	2	3	1	22	
		Stationary ..	8	..	3	1	3	..	2	..	17	
		Worse	1	..	1	..	..	..	..	..	2
		Died	1	..	..	..	..	..	1	1	3
	Ages 55 and over	Quiescent	3
		Improved ..	1	..	2	..	..	..	1	..	4
		Stationary ..	4	..	1	..	..	..	1	..	6
		Worse	1	..	..	..	..	..	..	..	1
		Died .. ..	..	..	..	..	1	..	1	..	2

Classification Admission	Age at Discharge	Condition on Discharge	Duration of Stay								Total	Positive Sputum on Admission— Negative on Discharge
			Under 3 months		3—6 months		6—12 months		More than 12 months			
			M.	F.	M.	F.	M.	F.	M.	F.		
CLASS T.B. PLUS, GROUP III.	Ages 15—24	Quiescent	4
		Improved ..	3	..	1	..	..	1	1	..	6
		Stationary ..	2	1	..	1	..	..	..	1	5
		Worse	1	3	1	1	..	..	..	..	6
		Died	6	5	2	..	1	2	1	..	17	
	Ages 25—34	Quiescent	2
		Improved ..	..	..	1	..	..	..	..	1	2
		Stationary ..	1	2	..	1	1	1	1	..	7	
		Worse	1	..	..	1	1	..	1	..	4
		Died	4	3	3	..	..	..	2	3	15
	Ages 35—44	Quiescent	2
		Improved ..	..	..	1	..	..	..	..	..	1
		Stationary ..	3	..	..	..	1	..	..	..	4
		Worse .. ..	..	..	..	1	1	..	..	..	2
		Died	3	2	3	..	..	..	..	1	9
	Ages 45—54	Quiescent	2
		Improved ..	..	..	2	..	..	..	..	..	2
		Stationary ..	1	..	1	..	..	..	2	1	5
		Worse .. ..	..	..	1	..	1	..	..	..	2
		Died	8	..	4	..	..	..	2	..	14
	Ages 55 and over	Quiescent	1
		Improved ..	..	..	3	..	..	..	..	..	3
		Stationary ..	1	..	..	..	..	..	..	..	1
		Worse	1	..	..	..	..	..	..	..	1
		Died	1	..	..	..	..	..	1	..	2

Summary of Tables.

Classification	Condition on Discharge				
	Quiescent	Improved	Stationary	Worse	Died
Class T.B. Minus	11	49	24	4	3
„ T.B. Plus, Group I.	1	3	1	..	..
„ T.B. Plus, Group II.	10	138	82	23	47
„ T.B. Plus, Group III.	..	14	22	15	57
Totals	22	204	129	42	107

Observation Cases.

Diagnosis on Discharge from Observation	Stay under four weeks		Stay over four weeks		Totals	
	M.	F.	M.	F.	M.	F.
Tuberculous	7	4	13	7	20	11
Non-Tuberculous	5	4	6	5	11	9
Doubtful	1	4	..	..	1	4

Three deaths (males) occurred among cases appearing under the classification T.B. Minus. The particulars in respect of these deaths are as follows :—

Age	Pathological Condition
55	1. Pulmonary Tuberculosis. 2. Silicosis. 3. Malignant disease left lung.
66.	1. Pulmonary Tuberculosis. 2. Chronic Bronchitis. 3. Silicosis.
53	Pulmonary Tuberculosis.

In each case the findings were confirmed by post-mortem examination.

Patients.

The usual lectures on elementary hygiene and preventive measures have been given to up-patients.

On account of the increased number of bed patients, a series of talks are now regularly broadcast, so that all patients can receive instruction and have explained to them the many important details of routine treatment.

The decrease in the number of patients reaching the higher and heavier grades of graduated exercise shows no sign of improving. The fear expressed in last year's report appears to be confirmed and that it will be necessary to consider the provision of additional staff.

Occupational Therapy.

Occupational therapy still proves to be of the greatest value to all patients on six or more hours up.

The opportunities of being able to dispose of work done by ex-patients are few and far between. The reasons are, firstly, that the productions of the in-patients more than meet the demand and, secondly, that the products of those crafts at which an appreciable number of patients reach a high degree of efficiency are the less readily saleable.

The present state of financial stringency necessitates postponing the consideration of any scheme for assisting ex-patients, such as the provision of a small factory.

There is now no doubt of the valuable part that "San Toy" magazine plays in the life of this sanatorium. While its preparation and distribution may fully occupy only one or two patients, there is little doubt that the circle of those who derive pleasure from it, either as contributors to its columns or as readers, is an ever widening one.

Recreation.

Opportunity is again taken of expressing sincere and grateful thanks to all those who have so willingly given their services in entertaining the patients. These entertainments have been of a high standard and have been very much appreciated.

Staff.

Six members of the Nursing Staff were successful in obtaining the Certificate of the Tuberculosis Association.

One of the problems associated with staff is the maintenance of physical fitness. It has not yet been possible to introduce a scheme of physical culture that could become part of their curriculum. There appears to be a wide scope for physical training, and there is no doubt that if it was part of the normal routine of life the individual and the sanatorium would benefit considerably.

The difficulties of recruitment are still present. On account of the constant changing of nursing staff it was felt that the brief instructions previously known to all members were not quite adequate. All members of the nursing staff joining either the permanent or the temporary now receive a printed card as follows :—

“ All members of the nursing staff will make themselves acquainted with the patients’ Rules and Regulations and see that they are carried out, not only to the letter but in the spirit.

The nursing staff must be ever on the watch that patients scrupulously observe the regulations as regards the use of sputum boxes and flasks.

The personal habits of the patients may often have to be guided in the right direction, or even taught anew. The protection of the mouth when coughing seems often to pass without comment and yet the spray from the mouth is dangerous material, particularly in the case of bed patients.

The responsibility of any member of the nursing staff to maintain discipline, control, and adherence to the Rules and Regulations is not merely confined to the patients in her own particular ward.

The nursing staff must never forget that such methods as the proper handling of infectious material, damp dusting and so on, should be of the greatest educational value to the patient.

It is essential that every member of the nursing staff should keep herself physically fit. Fitness depends on maintaining and living under healthy conditions, such as liberal amounts of moving air, sunlight in bedrooms and sitting rooms, sufficient sleep, cleanliness, sufficient suitable mental and physical recreation, taking adequate nutriment at regular intervals, and allowing ample time for meals. The tendency of rushing or even missing meals is one of the commonest causes of ill-health.

Members of the nursing staff are forbidden to take food or drink of any kind on or from the wards. The necessity for any member of the nursing staff to eat or drink on the ward no longer exists.

No patient is to be permitted to enter the kitchen, larder, linen room, or to use the telephone of any ward.

The washing of hands before meals and before preparing food for the patients is of paramount importance and must never be neglected. It is, of course, essential that the hands be washed after handling infectious material of any kind.

Even the most trivial accident, illness, or even feeling “ out of sorts ” must be reported immediately—never treat yourself nor receive unauthorised treatment.

The precautionary measures advised from time to time are for your benefit, *e.g.*, lemon or orange drink and the hot drink at night are of the greatest importance during the winter months. On coming in at night, if you feel that you are starting a common cold or influenza, see the Night Sister before going to bed and before having your hot drink so that you will receive suitable treatment that may entirely stop the development of the cold.

If strict precautions are adopted, the danger of contracting any disease is remote. This is particularly true of pulmonary tuberculosis.”

An improved working week for domestic staff who live in was introduced on trial during the year. The chief points about it are no broken time, off duty half days or evenings, and every other week the equivalent of a week-end, *i.e.*, off duty at 4-0 p.m. the first day, returning to duty at 2-0 p.m. on the third day. It has proved very popular among those of the staff who live close by and not quite so popular among those whose homes are distant. It appears, however, that when this section of the staff have their own home, with better accommodation for enjoying their leisure, it will be popular with all and a definite advance in working conditions.

In conclusion, I would record my personal appreciation of the loyal and willing service rendered by all members of the staff throughout the year.

BOOTH HALL HOSPITAL:

REPORT FOR THE YEAR ENDED 31ST DECEMBER, 1937.

By DR. W. H. PATTERSON, MEDICAL SUPERINTENDENT.

Statistics.

The following are the essential statistics for 1937, with the corresponding figures for 1936 shown for comparison:—

	1937	1936
(1) Total number treated ..	7,281	6,130
(2) Number of admissions ..	6,561	5,543
(3) Duration of stay (days) ..	24.55	28.6
(4) Deaths (all ages)	439	411

Fatal Cases in various Age Groups:—

	Deaths.
Under 1 year of age	256
Between 1 and 2 years	87
Between 3 and 5 years	41
Between 5 and 8 years	13
Between 8 and 16 years	36
Over 16 years	6
Total	439

Of the total deaths 73 (16½ per cent), died within 24 hours of admission, 141 (32 per cent), died within three days of admission; 171 (38 per cent.), died within seven days of admission,

A large proportion of the patients admitted here are those suffering from ordinary illnesses. To those who have practised in areas where hospital accommodation is very limited, the facilities offered by Manchester appear to be extremely good. Often the family doctor, while not in any doubt as to diagnosis or treatment, realises that domestic conditions make domiciliary treatment unsuitable. The admission of such cases, in addition to meeting the obvious demand, provides excellent material for the training of both medical and nursing staffs in the type of work the majority must be prepared to meet in their future careers.

The anticipated epidemic of measles materialised, and up to December 31st 245 cases were admitted. Instead of their being treated in general wards, the patients were cubicle-isolated, with a definite reduction in secondary infections. The debilitated child recently recovered from measles presents a problem as regards convalescence. Here, there are three possible methods of dealing with him. He may be transferred to an ordinary hospital ward, to a convalescent home, or discharged to the care of his parents. The objection to the first two methods is that the post-measles child is extremely susceptible to every type of infection, and particularly catarrhal conditions, which can never be regarded as completely absent where numbers of children are congregated. Against his being discharged home, there is the argument that economic conditions (or ignorance) may militate against proper nutrition, and lead to some permanent constitutional weakness. We have come to the conclusion, however, that the best solution for the average child is to discharge him home early, have him supervised, and see that extra nourishment is provided where necessary. Every case of measles is, on discharge, reported to the Central Public Health Department, and supervision of the convalescent is maintained by the health visitors. When some stability is established, a recommendation for convalescent home treatment can then be made and the position consolidated.

Casualty Department.

	1935	1936	1937
	<hr/>	<hr/>	<hr/>
Patients treated (all ages)	212	241	555
Patients subsequently admitted			
(all ages)	72	92	274
Brought in dead	4	3	8

Of the total number treated, 358 were direct casualties from our allotted casualty area. The remainder were transferred from other sources untreated, or having received "first-aid."

There were 117 cases of scalds and 28 cases of burns.

The establishment of the casualty department has fulfilled a need, and it is anticipated that it will be increasingly used when the adjacent housing scheme is completed. Adopted as a temporary measure, it suffices for our present needs, except when more than two casualties arrive simultaneously. Its distance from the X-ray department is a handicap which militates against expeditious evacuation of the casualties.

Surgical Department.

General surgical and orthopædic operations performed under general anæsthetic numbered 603. Of these, 262 were emergency operations. The nature of the operative work remains the same as in former years, but there has been an increase in the number of operations for pyloric stenosis and for intussusception.

Professor Telford, working under the Education Authority, performed 29 orthopædic operations here during the year.

Ear, Nose, and Throat Department.

Number of new patients examined in the department	1,770
Number specially examined in wards	489
Number of staff examined	42

Operations:—

	1937	1936
Tonsil and adenoid operations	564	455
Mastoid operations	51	71
Other E.N.T. operations	25	—

In addition to the above work, which was carried out by our own visiting aurist, 980 children had tonsil and adenoid operations under the Education Authority's scheme, the work being performed by other aurists appointed for the purpose. This figure is an increase of 195 over the previous year. The volume and nature of the work of this department merit separate theatre accommodation.

X-Ray Department.

	1937	1936
Number of patients X-rayed	2,716	2,234
Number of films exposed	4,042	3,210

The work of the department is entirely photographic.

Ophthalmic Department.

	1937
Number of patients examined in the department	71
Number of patients' attendances	259
Number of staff examined	15

Unlike the aural department, only in-patients are seen by the visiting ophthalmologist. The majority of these suffer from some other complaint in addition to the eye trouble. There was only one case of ophthalmia neonatorum during the year.

Physio-therapy Department.

	1937	1936
Number of patients given massage and electrical treatment	467	794
Number of treatments given	9,364	14,347
Number of patients given artificial sunlight	619	1,585
Number of treatments given	9,332	14,856

There has been a steady reduction in all the work of this department in recent years. This is due to several factors. With regard to ultra-violet light therapy, while it is a valuable specific remedy in certain diseases, it is no longer held to be a therapeutic panacea. Natural sunlight and fresh-moving air are, in the opinion of many, of greater value than short, concentrated doses of ultra-violet light administered in a closed and often over-heated room. The increase of knowledge as to the real uses of ultra-violet light has also resulted in a more restricted and effective selection of cases for this form of treatment by the medical staff.

The reduction of average duration of stay from 39 days in 1930 to 24.5 days in 1937 is also a factor. In addition, the sunlight department on the isolation pavilions has been closed since April of this year, as the congregation of recently-admitted patients in this small department was considered a danger spot in the control of infection.

Massage for purely psychological reasons is rarely necessary for children. Their own eagerness to get moving after weeks of fixation in splints and the absence of any "compensation" complexes reduces their visits to the massage department to a minimum,

The staff of this department has been reduced. One vacancy created by a resignation has not been filled, and a member of the staff has been transferred to another department.

Dental Department.

	1937	1936
Total number of children dentally inspected	2,996	2,359
Number of treatments	1,384	1,035

Seventeen per cent. of the children treated were referred to the dentist because their dental condition was considered to bear some relationship to the illness for which they were admitted to hospital.

There has been a marked increase in conservative work at all ages.

Pathological Department.

The routine swabbing, for the diphtheria bacillus, of the nose and throat of every new admission has been continued, and 13,130 of these were reported upon by the Crumpsall Laboratory. In addition, 747 swabs were reported upon for special reasons.

Seventy-six post-mortem examinations were made. This is only 16 per cent. of the total deaths.

Co-operation.

A letter, giving diagnosis and treatment while his patient was in hospital, is sent to every practitioner when the patient is discharged.

Co-ordination with the Maternity and Child Welfare Department, and with the medical department of the Education Authority continues satisfactorily.

We have been much helped by Mr. Graham Bryce, Mr. Jefferson, Mr. Bentley, and Dr. Ferguson of the Manchester Royal Infirmary, who examined, and in some cases operated upon, a number of our patients who were suffering from obscure or special diseases.

Retirements.

Attaining the age limit, Dr. D'Ewart and Miss Ashton retired from the staff, the former in April and the latter in November of the year under review. Dr. D'Ewart had been Medical Superintendent for seventeen years. As Matron, Miss Ashton served for an almost synchronous period. Present and former staff and numerous friends made presentations, and all expressed the wish for their health and happiness in retirement.

Visiting Staff.

No alteration has occurred in the personnel of the visiting staff during the year. It is a pleasure to record their co-operation, especially during epidemic times, when localization of the patients under their care was often impossible.

Resident Medical Staff.

Appointments :—

July, 1937 James Carson, M.D., D.P.H., as Deputy Medical Superintendent.

August, 1937 D. S. Quill, M.B., F.R.C.S. (I.), as Resident Surgical Officer.

The usual routine changes occurred in the junior staff.

Nursing Staff.

Miss Christine K. Lees, formerly Matron at the Prince of Wales Hospital, Plymouth, took up Matron's duties here in November, 1937.

The year's Nursing Examination results :—

Preliminary State Examination—14 entered, 10 passed.

Final State Examination—24 entered, 20 passed.

First prize in Class "C" (Medical) was won by the Student Nurses of our hospital unit, at an exhibition held by the Sister Tutor Section of the College of Nursing.

Illness amongst the nursing staff has been at its average level. Young probationers appear very liable to illness in their early months here. They are, however, often from rural areas and exposed here to a heavy battery of catarrhal infections. Of all ranks, 160 were off ill with a total number of days off duty of 1,689.

During the tennis season a professional coach was engaged to give lessons. Folk dancing had also a spell of enthusiasm. Educational visits were paid to the Moston Colliery, the "Daily Mail" works, and the C.W.S. Milk Station, and the Nurses' social club is much indebted to the officials concerned for their courtesy and interest.

Building and Reconstruction.

No major building has taken place. A cycle shed has been erected. Ward I has been provided with a concrete airing court for open-air and natural sunlight treatment. Reconstruction of kitchen, sanitary annexes, and ward heating arrangements, has been carried out in Ward II. Amongst other benefits the elimination of coal fires will be of advantage to the type of patient nursed in this ward, in addition to the saving of both time and labour on the part of the staff.

In conclusion, the Medical Superintendent desires to express his appreciation of the work, not only of the medical and nursing staffs, but of all other staffs upon whose loyal co-operation progress is dependent.

The actual volume of work done can be appreciated fairly well from recorded figures. Quality of work cannot be scheduled readily. In a table of results a fatal case is recorded merely as a fact, and no account is taken of careful diagnosis or good nursing.

Our thanks are also due to the many friends of the hospital who sent toys, etc. ; to those who took some of our chronically ill patients on " outings," all of which gave the children much pleasure ; and to various entertainers who, with their troupes have provided amusement for both patients and staff.

CRUMPSALL HOSPITAL.

REPORT FOR THE YEAR ENDED DECEMBER 31ST, 1937.
By DR. W. A. RAMSAY, MEDICAL SUPERINTENDENT.

Beds.

It is necessary to vary from time to time (according to needs) the allocation of beds for specific purposes. During the past year, the accommodation for orthopædic and gynæcological cases was extended, whilst that for chronic medical and venereal patients was reduced correspondingly. The following shows the arrangement of wards and beds as on 31st December, 1937 :—

Classification of Wards	Number of Wards	BEDS			
		Men	Women	Children	Total
Medical	16½	218	218	—	436
Surgical	14	145	160	—	305
Chronic sick	30	193	229	—	422
Children	½	—	—	30	30
Venereal	2	24	24	—	48
Maternity	6	—	112	—	112
Totals	69	580	743	30	1,353

It is to be noted that these figures relate solely to the optimum number of beds for each ward. It is often necessary, however, to increase this number considerably by placing extra beds in the wards and day-rooms, an action which it is difficult to justify, as the nurses are then over-worked, and the patients have not the proper amount of air space. During the year no patient requiring hospital treatment was refused admission, however difficult the circumstances.

Medical Staff.

Each consultant physician is in charge of two wards for men patients and two for women patients—approximately 100 beds altogether. Visits comprise two per week. During the absence of the consultant physician, the medical wards are under the supervision of the resident medical officer and the house physician.

The consultant surgeons also visit twice a week, once for operations and once for ward rounds. Most of the emergency surgery and a proportion of the other work is undertaken by the resident surgical officer, who also acts as deputy medical superintendent.

The orthopædic beds, as already stated, have had to be increased recently, and the orthopædic surgeon has now 75 beds in his charge, with an after-care clinic at the massage department. Additional assistance is required here.

During the year the resident surgical officer, Mr. R. J. W. Withers, M.D., F.R.C.S., gained the degree of Master of Surgery (with commendation), granted by the Queen's University, Belfast.

Miss Mary Evans, M.D., resident obstetrical officer, was admitted to membership of the British College of Obstetricians and Gynæcologists.

Nursing Staff.

No permanent additions have been made to the nursing staff, but it was found necessary to engage 20 assistant nurses during the summer for holiday relief, and three midwives for duty in the maternity wards because of the dearth of staff nurses. Owing to pressure of work, the assistant nurses are still retained pending permanent arrangements being made. The experiment of appointing nine junior maternity sisters in place of staff nurses has been entirely successful, all the vacancies having been filled by nurses with considerable midwifery experience.

During the year 113 members of the resident nursing and domestic staff were off duty owing to sickness, the average period of disability being 25 days. Of the non-resident nursing staff, 46 people were on the sick list for an average period of 21 days. The usual position is thus reversed, owing to the resident staff having 12 cases of illness lasting for more than 10 weeks.

The Nurses' Examination Results for 1937 are given below :—

	Passed	Failed
Hospital Final Examination	45	Nil
State Final Examination	38	7
State Preliminary Examination	33	5
C.M.B. Examination	27	5
Housekeeping Course	Five pupils took this course, and each gained a Certificate of Proficiency.	

Hospital Library Service.

During the last four years the hospital library has been well served by the voluntary efforts of library helpers drawn from various organisations in the neighbourhood. Working regularly and unsparingly five nights a week, they have given out 11,553 volumes to patients during the year 1937. These helpers wish to record their gratitude for the kindness and co-operation they have received from the nursing staff.

Up to date the Manchester Central Library has supplied the hospital with 1,000 volumes. It is interesting to note that there is not much demand for good literature. Most of the patients prefer detective, adventure, and romantic tales of a light nature. It is almost unnecessary to add that gifts of books of this description would be gladly welcomed by the hospital librarian, the Rev. E. W. G. Kemp. There is no doubt of the therapeutic value of this library service to patients in the convalescent stage. Many of them who have no friends have no means of obtaining books other than through the hospital library. We are satisfied that this service is much appreciated.

Structural Alterations.

Many alterations and additions to the buildings have been carried out during the past year. One ward has been completely remodelled, by means of screens projecting from the walls, the beds being placed parallel with the length of the ward. Two other wards have been partially altered, but the completion of this work was delayed owing to lack of funds. The last of the maternity wards has also been reconstructed, the additional equipment provided including a bed-pan washer, a bulk bed-pan sterilizer, a hot-water sterilizer, and new babies' baths.

Emergency lighting was provided in the labour room.

Improvements have also been carried out in the hospital annexe ; in the receiving wards ; in the nurses' dining room ; and in the domestic staff's sitting room.

New Equipment.

Purchases during the year include a portable electro-cardiograph ; a basal metabolic rate estimating machine ; and a surgical diathermy apparatus for urological work.

General Work of the Hospital.

Detailed information regarding the work of the hospital will be found in the statistical tables. It will be of interest, however, to refer to some of the items at this point. The number of admissions (15,330) is the highest ever recorded in any Manchester Hospital. The districts of Gorton and Openshaw were taken over from Withington Hospital at the beginning of the year, and this in some measure accounts for the increase of 2,779 in the number of patients admitted, compared with the figure for 1936.

Of the patients discharged or died during the year, 12,333 had been in hospital under four weeks, while only 457 had been in hospital over 13 weeks. The average number of occupied beds during the year was 1,214 ; the average number of available beds being 1,320. Considering the detailed classification of cases, the number of empty beds merely represents the day-to-day needs of the hospital.

Maternity Department.

This department has been tremendously overworked during the past year, and some means will have to be taken to limit the number of admissions, or, alternatively, to provide further accommodation. The number of cases admitted during the year was 2,483, the available beds being 112, of which 24 are for ante-natal cases. During the year, 411 women were treated in the ante-natal ward. The ante-natal clinic was attended by 2,294 women, who made 13,778 attendances. The post-natal clinic had 565 attendances.

Women who intend to be confined in hospital have the option of attending the local welfare clinic or of attending the hospital clinic. If they choose the former, they attend the hospital clinic after the seventh month, in case of any abnormality arising which would necessitate admission to hospital. There is a growing tendency for women to come into hospital for confinement, the main reasons being that it is cheaper ; that many of them consider it safer ; and, thirdly, that they are at least assured of two weeks' complete rest, which is often impossible at home.

Department of Surgery.

The total number of operations performed during the year was 2,471, excluding manipulative and closed fracture work. Of this number, 886 were carried out by the consultant staff; 657 by the resident surgical officer, Mr. Withers; 406 by the resident obstetrical officer, Dr. Evans; and the remainder by the assistant medical officers. Details of the operations performed are given in the following table:—

OPERATIONS ON SKIN AND SUPERFICIAL STRUCTURES.. .. .	172
Septic hands and tendon sheaths	32
Superficial abscesses, boils, and carbuncles	104
Suturing of wounds	7
Operations on lymph glands	7
Skin grafts	4
Burns	14
Others	4
OPERATIONS ON THORAX AND CHEST WALL	77
Empyema	21
Breast abscess	48
Breast tumours	8
OPERATIONS ON MOUTH AND LIPS	14
OPERATIONS ON BONES AND JOINTS :—	125
Insertion of Smith-Peterson nails	21
Osteomyelitis	13
Amputations	39
Cartilages of the knee	7
Compound fractures	12
Osteotomy	6
Bone graft	1
Others, including operations on feet, arthrodesis, etc.	26
OPERATIONS ON DUCTLESS GLANDS	31
Thyroidectomy	28
Splenectomy	3
OPERATIONS FOR HERNIA	171
Inguinal (including strangulated cases)	119
Femoral (including strangulated cases)	37
Umbilical (including strangulated cases)	11
Incisional	4

OPERATIONS ON ABDOMINAL WALL, ALIMENTARY CANAL, AND PERITONEUM, 572

Gastrostomy	3
Peptic ulcer	24
Perforations of peptic ulcers	41
Cancer of the stomach	7
Gall bladder and bile ducts	40
Appendix (those removed during the course of other abdominal operations not included)	211
Small intestine and omentum	31
Large bowel and rectum	47
Hæmorrhoids and prolapsus ani	59
Anal and peri-anal suppuration	34
Sigmoidoscopy	21
Intra-peritoneal abscesses	23
Burst abdominal wounds	2
Abdominal wall abscess	2
Unclassified abdominal (including laparotomies, in which nothing was done)	27
GENITO-URINARY OPERATIONS :	451
Cystoscopy	221
Prostatectomy	17
Trans-urethral resection of prostate	18
For stricture and other urethral conditions	63
On testis and epididymis	19
Nephrectomy, -otomy, ureterotomy (including calculus disease)	28
Peri-nephric abscess	7
Supra-pubic cystotomy	42
Other bladder operations	8
Operations on penis and scrotum	28
GYNÆCOLOGICAL OPERATIONS	683
Dilatation and curettage	424
Vaginal repairs	73
Ectopic gestation	7
Operations on uterus and adnexa (for tumour formation, cysts, and inflammatory lesions, etc.)	107
Other operations, including cauterization of the cervix, Bartholin cysts, caruncles, etc.	72
EAR, NOSE, AND THROAT OPERATIONS	129
Tonsillectomy	68
Mastoidectomy	17
Œsaphagoscopy	10
Brain abscess	2
Tracheotomy	2
Others (including operations on sinuses, polypi, etc.)	30
UNCLASSIFIED OPERATIONS, INCLUDING INSERTION OF RADIUM ..	46
NUMBER OF LAPAROTOMIES PERFORMED IN ALL DEPARTMENTS ..	586

Out-patient Work.

There is no out-patient building. Patients who have been treated in hospital may, however, continue to attend as out-patients for massage and electrical treatment, and many other purposes. The total number of out-patients seen (including ante-natal clinic) comprised 5,205, and the total number of attendances 16,807.

Other Departments.

353 patients were seen in the ear, nose, and throat department, and 612 attendances were made. The ophthalmic surgeon saw 296 patients, who made 321 attendances. 123 patients were referred to the dental surgeon. At the special obstetric clinic 58 women were given advice, the total number of attendances being 175.

During the year 172 post-mortem examinations were made.

The number of blood transfusions carried out was 74.

The number of casualties dealt with during the year was 1,085, of whom 206 were not admitted to hospital. The number of casualty cases referred from voluntary hospitals was 405, a considerable increase on the figure for last year (158).

REPORT OF THE MATERNITY DEPARTMENT OF CRUMPSALL HOSPITAL FOR THE YEAR 1937.

During the year 2,498 women were treated in the maternity department, Of these, 2,274 were booked cases (*i.e.*, had attended the ante-natal clinic at the hospital) and 224 were emergency cases.

The booked cases comprised the following:—

	Primips.	Multips.	Total
Patients delivered at or near term	1,130	1,123	2,253
*Patients delivered before 28th week ..	4	0	4
Patients admitted after delivery	12	4	16
Patients who died undelivered (over 28 weeks)	1	0	1
	1,147	1,127	2,274

The emergency cases comprised the following:—

	Primips.	Multips.	Total
Patients delivered at or near term	113	69	182
*Patients delivered before 28th week.. ..	9	7	16
Patients admitted after delivery	11	11	22
Patients who died undelivered (over 28 weeks)	2	0	2
Patients who died undelivered (under 28 weeks)	2	0	2
	137	87	224

* The majority of the abortions are treated in the gynæcological department.

MATERNAL MORBIDITY.

Morbidity is reckoned according to the Ministry of Health Standard.

By that Standard 20 cases were morbid in addition to the 13 deaths.

Therefore morbidity rate .. = 33 in 2,498
= 13.2 per 1,000

SUMMARY OF ABNORMAL LABOUR.

Abnormal Presentations.

	No. of Cases
Persistent occipito-posterior	41
Breech	79
Face	12
Shoulder	6
Twins	33

Complications.

Ante-partum hæmorrhage—

(a) Placenta prævia	20
(b) Accidental	19 (1 maternal death)
Post-partum hæmorrhage	25 (1 maternal death)
Prolapse Cord	12
Eclampsia	5

OPERATIONS PERFORMED.

Cæsarean Section—

(a) Lower segment	21 (1 maternal death)
(b) Upper segment	8

Cæsarean Hysterectomy 1

Forceps 63

Craniotomy—

(a) For impacted face	1
(b) For hydrocephalus	3

Induction of premature labour—

(a) Medicinal	14
(b) Artificial rupture of membranes ..	6
(c) Bougie	16

Therapeutic Abortion (Taylor's bag) .. 3

Manual removal of placenta 14

Version—

(a) External cephalic	37
(b) Internal podalic	9
(c) Bipolar podalic	3
(d) External podalic	1

ANTE-NATAL TREATMENT.

During the year, 267 patients received in-patient treatment in the ante-natal ward for various reasons. The conditions for which the treatment was given are indicated in the following table :—

Type of Case	Number of Cases
Toxic albuminuria	51
Cardiac disease	40
Pyelitis	24
Debility	22
Pulmonary disease (non-tuberculous)	19
Urinary investigations	14
Ante-partum Hæmorrhage	14
Hyperemesis gravidarium	10
Œdema	7
Asthma	7
Late vomiting of pregnancy	6
Multiple pregnancy	4
Chronic nephritis	4
Constipation.. .. .	3
Phlebitis	3
Dental sepsis	3
Varicose veins	2
Hæmorrhoids	2
Anæmia	2
Hydramnios	2
Perinephric abscess	1
Diabetes	1
Degenerating fibroid	1
Ovarian cyst	1
Various investigations	24
	267

INFANTS REPORT.

Still-births.

	Booked	Emergency
Full term	42	22
Premature	41	20

Neo-natal Deaths.

	Booked	Emergency
Full term	32	6
Premature	18	17

Number of women delivered	2,435
Number of twin pregnancies	33
Number of infants born	2,468
Number of still-births	125
Still-birth rate	5.06 per cent.
Number of infants dying after delivery	73
Neo-natal death rate	2.96 per cent.
Combined still-birth and neo-natal death rate	8.02 per cent.

MONSALL HOSPITAL.

REPORT FOR YEAR ENDED DECEMBER 31ST, 1937, BY
D. SAGE SUTHERLAND, M.D., MEDICAL SUPERINTENDENT.

At the close of the year 1936, 429 patients remained in hospital. During 1937, 5,016 were admitted. The total number under treatment during the year was 5,445. There were 184 deaths and 4,857 were discharged cured.

404 remained in hospital at the end of the year.

The outstanding feature in a survey of the work of the year has been the increase in diphtheria admissions. In the report of 1936, a rise of 555 cases on the previous year was recorded. During 1937 there has been a further increase of 134 cases, and the allocation of increased accommodation for diphtheria has limited the beds available for the treatment of other infectious diseases.

Measles became epidemic towards the close of the year, but it was not possible, as formerly, to allocate special wards for complicated cases of this disease.

The number of admissions of whooping cough shows an increase of 53 on the previous year, and in the case of erysipelas a decrease of 32.

The largest total number of cases admitted to hospital was during the month of October, when 512 cases were received. The maximum number of patients in hospital was 496 on November 12th, and the minimum number was 269 on August 18th, 1937.

The average daily number of patients in hospital for the year was 408·7, as against 410·9 in the year 1936.

The average duration of stay for each patient was 29·6 days, as against 29·8 in 1936.

The fatality-rate for all cases under treatment was 3·7 per cent., as compared with 4·7 during 1936.

In 498 cases, or 9·9 per cent., the diagnosis was altered from the certified disease.

Scarlet Fever.

One hundred and ninety-nine cases remained in hospital at the end of the previous year, and during the year 2,031 were admitted, showing a decrease of 64 on the previous year. The number of discharges was 2,040, and 5 deaths occurred during the year, giving a death-rate of 0·24 per cent. During the previous year the death-rate was 0·52 per cent.

The average stay in hospital was 33 days, showing an increase of 0·2 days on the previous year. The average number of days in hospital of fatal cases was 15·2.

The total number of scarlet fever cases receiving anti-toxin on admission was 405 = 19·9 per cent.

SCARLET FEVER FATALITIES.

Death occurred in five verified scarlet fever cases :—

	Deaths.
Scarlet fever, septicæmia, and cellulitis face	1
„ „ and broncho-pneumonia	2
„ „ and empyema	1
„ „ and lobar pneumonia	1

SCARLET FEVER RETURN CASES.

The number of cases of scarlet fever discharged from hospital during the year 1937 was 2,040. The number of true return cases for the year was 89, the return case-rate being, therefore, 4·4 per cent. as against 3·4 per cent. for 1936.

The average duration of stay in hospital of cases giving rise to secondary cases was 28·8 days. The average interval elapsing between the discharge of the primary case from hospital and the onset of the disease in the secondary case was 10·9 days.

Return cases infected :—

During 1st week after discharge of primary case 34·8 per cent.			
„ 2nd	„	„	40·4 „
„ 3rd	„	„	16·8 „
„ 4th	„	„	8·0 „
2 cases gave rise to 3 return cases.			
9 cases gave rise to 2 return cases.			
65 cases gave rise to 1 return case.			

AGE DISTRIBUTION OF INFECTING CASES.

	Discharges	Infecting Cases	Percentage
Under 1 year	11	—	—
1—4 years	520	13	2·5
5—9 „	877	44	5·0
10—14 „	375	14	3·7
15—19 „	108	4	3·7
20+ „	149	1	0·7
Total	2,040	76	3·7

In 20 patients a condition was noted after discharge to which infection might have been attributed, viz., rhinorrhœa (4 cases), otorrhœa (4 cases), excoriation of nose (7 cases), sore on face (4 cases), and sore on finger (1 case). The other infecting cases remained free from discharges and other complications at the time of the occurrence of the secondary case.

Monthly Table.

1937	Discharges	Return Cases	Percentage
January	145	5	3·4
February	146	4	2·7
March	163	6	3·7
April	150	9	6·0
May	177	5	2·8
June	150	4	2·7
July	203	2	1·0
August	156	3	1·9
September	141	5	3·5
October	201	10	4·9
November	209	17	8·1
December	199	19	9·5
Total	2,040	89	4·4

Minimum—1·0 per cent., July.

Maximum—9·5 per cent., December.

RELATIVE VALUE OF TREATMENT OF 300 CASES OF SCARLET FEVER BY SERUM, PRONTOSIL, AND OTHER METHODS.

Between April, 1937, and June, 1937, all the cases of scarlet fever admitted to Monsall Hospital were treated with (a) p-amino-phenylsulphonamide, (b) serum, or (c) given other treatment in rotation, no selection being made.

This provided three groups, comprising 100 cases each, of sulphonamide-treated, serum-treated, and other treatments.

(a) The preparation used in the sulphonamide group was Prontosil Album (Bayer). 0·3 gramme tablets were given three times a day orally, or, in the more severe cases, four-hourly.

The dosage varied from one to four tablets, according to the age of the patient. Administration was continued as long as pyrexia lasted (usually about three days), but in one case for as long as six days. In "apyrexial" cases treatment was given for two days.

A few cases showed well-marked cyanosis, due to sulphæmoglobinæmia, but this caused no disturbance of the patient and was not considered an indication for omitting treatment.

(b) Serum-treated cases were given 10 — 20 c.c. of concentrated streptococcus antitoxin (scarlatinal) B.W. on admission.

(c) This group of cases had the routine hospital treatment for scarlet fever.

No attempt was made to divide the cases into sex or age groups, but the average age of each group was (a) 8.5 years, (b) 8.7 years, and (c) 8.2 years.

TABLE I.

Table I. shows the average number of days in hospital, the average day of disease on admission, the average number of days of pyrexia and the percentage of cases developing complications, for each group, and for the whole series of 300 cases.

The days of pyrexia were calculated from the day of admission until the first day the temperature fell to normal and remained so for 24 hours.

These figures show that the third group of cases had a more prolonged period of pyrexia, indicative of toxic absorption. Of the other two groups, the serum-treated cases showed better response to treatment, by reduction of the period of pyrexia, than the Prontosil group.

Of the cases developing complications, the average for the whole was 29 per cent. In the serum-treated group the complication rate of 24 per cent. shows an improvement on either of the other two groups.

TABLE II.

This shows the various percentages of the total complications occurring in the series.

The percentage of the total number of chief complications—nephritis and albuminuria, adenitis and otorrhœa, was lowest in the serum group—20 per cent., and highest in the third group—29 per cent.

Serum reactions, occurring about the 7th to the 12th day, were present in 40 per cent. of the serum-treated cases. The majority of these were urticarial rashes, but joint pains and adenitis were frequent.

The number of cases given 20 c.c. of serum on admission was 12, and the number having 10 c.c. of serum on admission was 88. Of the cases having the larger amount of serum, 7 developed reactions, *i.e.*, 58 per cent., and of the cases having 10 c.c., 33 developed reactions, *i.e.*, 38 per cent.

TABLE III.

The cases were grouped into four groups, depending on the day of disease on admission, thus (1) 1st day, (2) 2nd day, (3) 3rd day, (4) 4th day onwards.

CONCLUSIONS.

The figures are too small to differentiate the value of serum and Prontosil in the prevention of complications. As both the serum and the Prontosil-treated cases show better results than the cases receiving the normal or routine treatment, it would appear that the combined method of treatment should be adopted.

TABLE I.

Total number of cases : 300.

	Whole Series : 300 Cases	Serum- treated : 100 Cases	Prontosil- treated : 100 Cases	Routine Hospital Treatment : 100 Cases
Average number of days in hospital	31.44	28.78	30.19	35.35
Average day of disease on admission	2.76	2.75	2.76	2.78
Average number of days of pyrexia	2.11	1.80	1.99	2.54
Percentage of cases developing complications	29	24	30	32

TABLE II.

Complications.

Complication	Whole Series	Serum- treated	Prontosil- treated	Routine Hospital Treatment
	Per cent.	Per cent.	Per cent.	Per cent.
Nephritis or Albuminuria	5	3	9	3
Adenitis (late)	13	13	11	16
Otorrhœa	7	4	6	10
Arthritis	2	1	4	1
Empyema	—	1	—	—
Bronchitis	—	—	—	2
Relapse	—	2	—	—
Serum reaction	—	40	—	—

TABLE III.

Cases admitted on 1st day of Disease.

	Serum-treated	Prontosil-treated	Routine Hospital Treatment
Cases	15	12	9
Average number of days in hospital ..	30.40	34.41	38.33
Average number of days of pyrexia ..	1.80	2.16	2.67
Percentage of cases developing complications	33.33	33.33	22.22

Cases admitted on 2nd day of Disease.

	Serum-treated	Prontosil-treated	Routine Hospital Treatment
Cases	35	40	41
Average number of days in hospital ..	29.31	31.75	38.32
Average number of days of pyrexia ..	1.94	2.21	3.05
Percentage of cases developing complications	20	15	27.02

Cases admitted on 3rd day of Disease.

	Serum-treated	Prontosil-treated	Routine Hospital Treatment
Cases	26	24	27
Average number of days in hospital ..	33.19	31.25	35.33
Average number of days of pyrexia ..	1.84	1.54	2.37
Percentage of cases developing complications	26.92	37.5	40.74

Cases admitted on 4th day of Disease onwards.

	Serum-treated	Prontosil-treated	Routine Hospital Treatment
Cases	24	24	23
Average number of days in hospital ..	26·41	27·45	28·92
Average number of days of pyrexia ..	1·69	1·83	1·78
Percentage of cases developing complications	20·8	45·83	34·78

AGE INCIDENCE OF SCARLET FEVER CASES.

Age Incidence	Number	Percentage
0—5 years	534	26·1
5—10 „	878	42·9
10—15 „	375	18·3
15—20 „	108	5·3
20+ „	150	7·3

COMPLICATIONS IN SCARLET FEVER.

Complication	Number	Percentage
Rhinorrhœa in Convalescence	73	3·6
Otorrhœa	208	10·2
Nephritis	10	0·5
Albuminuria in Convalescence.. .. .	83	4·1
Adenitis and Abscess	7	0·3
Endocarditis	4	0·2

ACTIVE IMMUNIZATION AGAINST DIPHTHERIA IN PATIENTS ADMITTED TO HOSPITAL SUFFERING FROM SCARLET FEVER.

292 cases of scarlet fever were completely immunized against diphtheria and 138 were incompletely immunized.

DIPHTHERIA.

The number of patients admitted certified as diphtheria was 1,795, as against 1,661 in 1936, showing an increase of 134. The total number under treatment was 1,991. There were 1,721 discharges and 91 deaths. 24 deaths occurred within 48 hours of admission. The gross fatality rate was 5.02 per cent., as against 6.6 during the previous year, or 3.75 excluding the 24 deaths referred to.

344 cases out of the total were diagnosed as diphtheria carriers ; excluding these carrier cases the fatality rate is 6.2.

The average stay in hospital of the patients who recovered was 34.7 days and for fatal cases 8.9 days.

265 cases certified diphtheria were found to be suffering from some other disease ; of these cases 10 proved fatal.

Intravenous Serum Treatment of Diphtheria.

Of 1,795 admissions, 335 cases were of severe type necessitating treatment with serum by intravenous injection. The following table indicates the higher mortality of this type of diphtheria :—

Total number of cases treated with intravenous									
anti-diphtheritic serum									
									335
Deaths									
									69
Case mortality									
									20.6 per cent.

Sixteen deaths occurred within 48 hours. If these are excluded the death rate equals 16.6 per cent.

Fatal cases : Average day of disease on									
admission									
									3.8

Recovered cases : Average day of disease on									
admission									
									3.0

FATAL CASES : DAY OF DISEASE ON WHICH DEATH OCCURRED.

Day	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	13th
Cases.. .. .	4	4	2	7	7	6	3	3	4	2	7
Day	14th	15th	16th	17th	18th	19th	22nd	39th	41st	44th	51st
Cases.. .. .	3	3	4	1	1	2	2	1	1	1	1

The recovery rate of severe cases of diphtheria for 1937 shows an improvement on that for 1936, when the death rate, excluding deaths within 48 hours, was 21.2 per cent., as against 16.6 per cent. in the year 1937. It is further noted from a survey of the deaths that cases ending in a fatal issue have survived to a later period than in the previous year. As the treatment has been along parallel lines during the two successive years this may be evidence of the decreasing malignancy of the disease.

The average number of days in hospital of recovered cases was 64 days.

Of the 266 cases who recovered, 99 (37.2 per cent.) suffered from post-diphtheritic paralyses: of these there were three cases of diaphragmatic paralysis. Of the deaths there were four cases of diaphragmatic paralysis and one case of palatal paralysis.

TABLE SHOWING PARALYSES AS THEY OCCURRED IN THOSE PATIENTS WHO RECOVERED.

Palatal paralysis	..	..	..	..	..	..	..	54
Ocular paralysis	..	..	..	..	..	..	..	14
Ocular and palatal paralysis	..	..	..	..	..	..	..	9
Palatal and pharyngeal paralysis	..	..	..	..	..	..	..	11
Palatal, pharyngeal, and diaphragmatic paralysis								3
Facial paralysis	..	..	..	..	..	..	..	3
Facial paralysis and strabismus	..	..	..	..	..	..	..	2
Hemiplegia	..	..	..	..	..	..	..	1
Palatal, ocular, and facial paralysis	..	..	..	..	..	..	..	1
Palatal and facial paralysis	..	..	..	..	..	..	..	1

Cases treated in the Drinker Respirator.

During the year seven patients have been treated in the Drinker respirator for paralysis of the respiratory muscles. Of these, three recovered and four died. All suffered from a severe attack of nasopharyngeal diphtheria on admission, while one had in addition laryngeal symptoms which necessitated suction of the larynx under direct vision to relieve the obstruction. All cases developed paralysis of the palate and pharynx prior to the onset of respiratory muscle paralysis and all had, during the course of the disease, a marked degree of involvement of the heart muscle, which eventually led to death in four of the cases. Five of the number developed strabismus about the same time as the other pareses.

The following are the details :—

Age of Patient	Male or Female	Recovered or Died	Day of Disease on Admission	Paralyses and Day of Onset	Time in Drinker Respirator
1½ years ..	M.	Recovered	3rd	Palatal and pharyngeal (33rd day) Diaphragm (34th day) Strabismus (37th day)	3½ days
5 years ..	M.	Died	7th	Palatal (28th day) Pharyngeal (33rd day) Diaphragm (45th day) Strabismus (48th day)	5½ days
5 years ..	F.	Died	2nd	Palatal (37th day) Pharyngeal (43rd day) Diaphragm (45th day)	1 day
2 years ..	F.	Died	4th	Palatal (34th day) Pharyngeal (37th day) Strabismus (38th day) Diaphragm (38th day)	1½ days
3½ years ..	F.	Recovered	4th	Palatal (34th day) Pharyngeal (48th day) Strabismus (48th day) Diaphragm (50th day)	4 days
7 years ..	F.	Recovered	7th	Palatal (30th day) Strabismus (42nd day) Pharyngeal (43rd day) Diaphragm (47th day)	9 days
5 years ..	M.	Died	2nd	Palatal (37th day) Pharyngeal (40th day) Diaphragm (42nd day)	1 day

Laryngeal Diphtheria.

In a number of cases admitted with laryngeal diphtheria, laryngoscopy and electrical suction of the larynx and final swabbing with adrenalin was sufficient to overcome the obstruction, but in others tracheotomy was later performed.

The number of cases in which tracheotomy was necessary was 24, an increase of six on the number of operations in 1936.

TRACHEOTOMY CASES.

	Cases	Deaths
Under 1 year	2	—
1—2 years	4	1
2—3 „	5	1
3—4 „	1	..
4—5 „	1	..
5+	11	1
	—	—
Total	24	3
	—	—
Mortality Rate	12.5 per cent.	

DIPHTHERIA CASES—1,468.
(excluding 344 carriers)

Age Incidence	Number	Percentage	Percentage Death Rate
0—5 years	303	20·6	9·6
5—10 „	655	44·6	8·2
10—15 „	302	20·6	0·9
15—20 „	98	6·7	1·02
20+	110	7·5	1·8

COMPLICATIONS IN DIPHTHERIA.

Complication	Number	Percentage
Otitis media	134	9·1
Palatal paresis	135	9·2
Pharyngeal paralysis	14	1·0
Facial paralysis	11	0·7
Respiratory paralysis.. .. .	7	0·5
Ocular paralysis	65	4·4
Cardiac arrhythmia	29	2·0
Bradycardia	36	2·5
Peroneal paralysis	1	0·1
Arm and leg paralysis	1	0·1

ACTIVE IMMUNIZATION AGAINST SCARLET FEVER IN DICK-POSITIVE
REACTORS ADMITTED TO HOSPITAL SUFFERING FROM DIPHTHERIA.

Age	Total Tested	+ ve	Percentage + ve	— ve	Completely Immunized	Incompletely Immunized or not Retested on Discharge
0—1	15	4	26·7	11	1	3
1—2	67	19	28·3	48	10	9
2—3	104	42	40·4	62	25	17
3—4	115	57	49·6	58	26	31
4—5	167	66	39·5	101	21	45
5—10	598	189	31·6	409	66	123
10—15	276	60	21·7	216	18	42
15—20	85	22	25·9	63	5	17
20+	95	21	22·1	74	2	19
	1,522	480	31·5	1,042	174	306

ENTERIC FEVER GROUP.

In hospital at commencement of year ..	1
Admitted during the year	19
Incorrectly diagnosed	12
Remaining in hospital at end of year ..	2
Discharged	6
Died	Nil
Average day of disease on admission ..	13th
Average stay in hospital	73·0 days.
Average age of patients	25·8 years.

Other diseases admitted as Enteric Fever :—

Intestinal carcinoma	1 case. Recovered.
Functional dyspnœa	1 „ „
Pelvic tumour	1 „ „
Bacilluria	1 „ „
Pernicious anæmia	1 „ „
Tuberculous abdomen	1 „ „
Pleurisy and effusion	1 „ „
Duodenal ulcer	1 „ „
Acute gastro-enteritis	1 „ Died.
Nil (positive Widal post immunization) ..	2 cases.

The type of disease in the cases discharged was as follows :—

Typhoid	4 cases.
Paratyphoid	2 „

All of the cases ran an uncomplicated course throughout,

ERYSIPELAS.

Two hundred and twenty-seven cases were admitted, a decrease of 32 on the previous year, and 208 cases were discharged.

Since the last report the use of ultra-violet light has been discontinued, and drugs of the sulphonamide group have been given to all cases. The results of this treatment have been exceptionally good.

Seven deaths occurred, giving a mortality-rate of 3·3 per cent., as against 9·1 per cent. in the previous year. None of these was a straightforward case of erysipelas: there was at least one other factor complicating the disease.

The causes of death in these seven cases were :—

- Erysipelas and senility.
- Erysipelas (recent history of intestinal obstruction).
- Erysipelas, chronic bronchitis, and myocarditis.
- Erysipelas, hæmatemesis, and gastric ulcer.
- Erysipelas and streptococcal meningitis.
- Erysipelas and herpes facialis.
- Erysipelas and malnutrition (child of 8 weeks).

There were 47 cases notified as erysipelas in which the original diagnosis had to be amended. The following is a list of the conditions in which alteration of the notified diagnosis had to be made :—

	Cases
Abscess, back	1
Abscess, forehead	1
Abscess, nasal septum	1
Adenitis, neck	1
Carbuncle, neck	2
Cavernous sinus thrombosis	1
Cellulitis	18
Chronic bronchitis and nephritis	1
Dacryocystitis	1
Dermatitis	3
Eczema	5
Erythema	1
Frontal sinusitis	1
Furuncle, nose	1
Herpes frontalis	4
Impetigo	2
Septic parotitis	1
Septic sore foot	1
Staphylococcal cellulitis and staphylococcal septicæmia	1

MEASLES.

Fifty cases of measles were admitted during the year 1937, and 38 were discharged. Four deaths occurred, giving a fatality-rate of 9·5 per cent. Two of these deaths occurred within 24 hours of admission.

COMPLICATIONS IN MEASLES.

	Survived	Died
Respiratory :—		
Broncho-pneumonia	6	2
Laryngitis	1	—
Broncho-pneumonia and acute laryngitis (tracheotomy)	—	1
Acute laryngitis (tracheotomy) ..	—	1
Ears :—		
Otitis media	3	—
Eyes :—		
Blepharitis and conjunctivitis	1	—
Strabismus	1	—
Miscellaneous :—		
Adenitis	1	—

Several adults who had been suffering from measles gave blood for the production of measles convalescent serum, which has been used in the prevention of the disease in wards in which a case of measles has arisen.

WHOOPING COUGH.

Seventy-nine cases of whooping cough were admitted during 1937, as against 26 in the previous year. There were 6 deaths, giving a death-rate of 7·6 per cent., as against 15·4 in 1936.

Age	Number of Cases	Deaths	Percentage Death Rate
Under 1 year	16	4	25·0
1 year	10	..	..
2 years	9	1	11·1
3 „	18	1	5·6
4 „	8	..	..
5 +	18	..	..
	79	6	7·6

The cause of death in the 6 fatal cases, 4 of whom were under 1 year of age, was as follows :—

Broncho-pneumonia 6 cases.

The complications noted in the cases under treatment were as follows :—

Broncho-pneumonia 11 cases — 13·9 per cent.
Otorrhœa 2 „ — 2·5 „
Tonsillitis 2 „ — 2·5 „
Bronchitis 3 „ — 3·8 „
Laryngitis (tracheotomy) . . 1 case — 1·3 „

CEREBRO-SPINAL FEVER.

Forty-three cases of meningococcal meningitis were treated during the year. Of these, 19 died and 24 recovered, giving a fatality-rate of 44·2 per cent. Six patients died within 48 hours of admission, and, excluding these, the fatality-rate from this disease was 35·1 per cent.

	No. of Cases	Male	Female	Died	Recovered	Case Mortality per cent.	
						Total	Excluding Deaths in 48 hours
Under 1 year ..	7	1	6	5	2	71·4	60·0
1 to 5 years ..	12	9	3	4	8	33·3	33·3
5 „ 10 „ ..	4	1	3	1	3	25·0	..
10 „ 20 „ ..	11	6	5	6	5	54·6	44·4
20+	9	4	5	3	6	33·3	25·0
	43	21	22	19	24	44·2	35·1

Average day of disease on admission to hospital :—
Recoveries : 5th.
Deaths : 6th.

Average day of disease on which death occurred : 17th.

It will be seen from the table that the death-rate in children under one year suffering from cerebro-spinal fever remains very high, five out of seven cases having died.

Average number of punctures performed (lumbar or cistern) : 11·5.

Average amount of serum administered to each case (intrathecally, intraperitoneally, intravenously, or intramuscularly) : 99 c.c.'s.

Seven cases received meningococcus antitoxin, in addition to serum, the average amount being 72 c.c.'s.

	Cases	Recoveries	Deaths	Fatality Rate per cent.
Polyvalent and Group I. type serum ..	28	16	12	42·8
Polyvalent serum and meningococcus antitoxin	1	1	—	—
Polyvalent and Group I. type serum and meningococcus antitoxin.. ..	5	2	3	60·0
Polyvalent and Group I. type serum and sulphonamide compounds ..	6	4	2	33·3
Meningococcus antitoxin	1	1	—	—

Two cases, moribund on admission, received no serum.

The number of cases admitted shows a decrease of three on the previous year.

OTHER INFECTIOUS DISEASES.

The following table gives the admissions of other infectious diseases during the year :—

	Cases.
Rubella	59
Chickenpox	30
Mumps	8
Pemphigus	7

TABLE SHOWING NUMBERS OF VARIOUS
DISEASES TREATED.

	Remaining in Hospital, Jan. 1st, 1937	Admitted	Discharges and Deaths	Remaining in Hospital, Dec. 31st, 1937
Scarlatina	199	2,031	2,045	185
Diphtheria and Diphtheria Carriers	196	1,795	1,812	179
Enteric Fever Group ..	1	7	6	2
Erysipelas	6	227	215	18
Puerperal Fever & Pyrexia	11	169	177	3
Measles .. .. .	..	50	42	8
Other Diseases	16	737	744	9
Total	429	5,016	5,041	404

POST MORTEM EXAMINATION.

During the year 21 post-mortem examinations were performed.

Disease Notified	Post-mortem Findings
Diphtheria	Tuberculous meningitis
„	Diphtheria. Lobar pneumonia.
„	Diphtheria. Broncho-'pneumonia.
„	Diphtheria. Diaphragmatic paralysis. Hypostatic pneumonia.
„	Acute lymphatic leukæmia.
„	Septicæmia. Suppurative adenitis. Retro-pharyngeal abscess.
? Diphtheria	Septicæmia due to septic tonsils and fauces
Erysipelas	Cavernous sinus thrombosis.
„	Erysipelas. Cellulitis face. Broncho-pneumonia.
Puerperal sepsis	Pericarditis with effusion. Unresolved lobar pneumonia (puerperium).
Puerperal pyrexia	Puerperal sepsis.
Cerebro-spinal fever	Cerebro-spinal fever (two cases).
„ „	Pneumococcal meningitis. Lobar pneumonia.
„ „	Tuberculous meningitis. Miliary tuberculosis. Caseous tubercles in lungs.
Meningitis	Pneumococcal meningitis. Lobar pneumonia.
„	Tuberculous meningitis. Acute miliary tuberculosis.
„	Gastro-enteritis.
Meningitis and broncho-pneumonia	Tuberculous meningitis. Acute miliary tuberculosis. Tuberculous bronchial glands.
Mumps	Hæmolytic streptococcal septicæmia. Hæmolytic streptococcal empyema. Perirenal abscess.
Measles	Measles. Acute broncho-pneumonia.

AURAL REPORT.

The total number of cases of otorrhœa occurring in the hospital during 1937 was 358. These were distributed as follows :—

In scarlet fever	.. .. .	208
„ diphtheria	.. .. .	134
„ measles	.. .. .	3
„ miscellaneous disease	.. .. .	13

During the year 158 cases were admitted for treatment to the special Aural Ward.

(A) *Scarlet Fever.*

Among the 2,040 cases discharged and 5 deaths during 1937 there were 208 cases of otorrhœa, a case-incidence of 10·2 per cent.

Mastoid drainage was required in 11 cases, being an incidence of 0·5 per cent. of scarlet fever cases and 5·3 per cent. of cases of otorrhœa.

Of the total cases, 166 were unilateral and 42 bilateral; 36 of the cases were recurrences or exacerbations of chronic pre-scarlatinal otitis.

The average day of onset of otorrhœa was the 15th and the average duration of otorrhœa was 32 days.

Anti-scarlatinal serum was administered to 28 of the cases (13·4 per cent.) on admission.

Of the cases 87 were females and 121 males.

Operations performed by the Aural Surgeons.

Mastoid drainage—

Unilateral	.. .. .	10
Bilateral	.....	1

Among the 11 cases the average day of disease on which mastoid drainage was required was the 30th, and the average duration of otorrhœa after the operation was 34 days. Of the cases 7 were females and 4 were males.

(B) *Diphtheria.*

Among the 1,721 cases discharged and 91 deaths during 1937 there occurred 134 cases (7·4 per cent.) of otorrhœa,

Of these, 89 were unilateral, 45 were bilateral, and 8 were recurrences of pre-diphtheritic otitis. (43 +ve K.L.B. in smear.)

Of the cases 50 were males and 84 were females.

Three mastoid operations were performed.

(c) *Measles.*

Among the 38 cases discharged and 4 deaths during 1937 there occurred 3 cases (7.1 per cent.) of otorrhœa.

Of these, 2 were unilateral and 1 bilateral. Of the cases 2 were males and 1 was a female.

Miscellaneous Cases in which Otorrhœa occurred.

Erysipelas	..	..	..	..	..	4
Whooping Cough	..	..	..	..		2
Cerebro-spinal Fever	..	..	..			3
Tonsilitis	..	..	..	..	..	2
Mumps	..	..	..	..	..	1
Enteritis	..	..	..	..	..	1

SPECIAL ISOLATION WARDS.

434 cases were treated in the Glass Cell Ward and 653 cases in the Bed Isolation Ward.

The cases admitted to these wards largely come under the following groups :—

- (a) Cases for which there is no other accommodation available in the Hospital.
 - (b) Cases in which two or more diseases are present concurrently.
 - (c) Cases in which there is a history of exposure to another disease.
 - (d) Cases in which the diagnosis of the disease certified remains in doubt.
-

LABORATORY REPORT.

MICROSCOPICAL EXAMINATION OF CULTURES FOR B. DIPHTHERIA.

Source of Swab	Positive	Number Examined
(Loeffler culture media).		
Throat	1,070	14,082
Nose	1,211	15,220
Ears	300	3,408
Eyes	20	100
	2,601	32,810

In addition to the Loeffler cultures, 1,434 tellurite cultures were examined, of which 620 were positive.

A list is appended of other specimens examined in the laboratory during the year :—

Fæces	146
Urine	381
Sputum	14
Cerebro-spinal fluid	101
Eye swabs	15
Cervical swabs	380
Vaginal swabs	406
Vaginal smears	40
Blood cultures—	
Anærobic.. .. .	18
Ærobic	226
Pus cultures	69
Blood counts	14
Agglutinations	38
Direct smears	51
Miscellaneous swabs	142
Miscellaneous fluids	33

ILLNESS OF NURSING STAFF NECESSITATING
WARD TREATMENT DURING 1936.

Condition	Number of Cases	Days Warded
Adenitis	1	7
Appendix adhesions	1	6
Appendix colic	1	21
Bronchitis	2	127
Catarrhal cold	11	74
Catarrhal jaundice	4	54
Cellulitis of chest wall	1	33
Chicken-pox .. .	1	25
Conjunctivitis	2	25
Dermatitis	2	31
Diphtheria .. .	6	355
Erysipelas	1	6
Gastritis	2	7
Influenza	17	135
Influenza and conjunctivitis	1	35
Laryngitis	3	36
Lymphangitis	1	5
Measles	1	21
Menorrhagia	1	4
Metrorrhagia	1	6
Mumps	1	20
Oedema foot	1	13
Otitis media	1	15
Pes planus	1	3
Quinsy.. .. .	2	21
Reaction to A. S. P.	1	11
Reaction to T. A. B.	1	13
Reaction to vaccination	1	8
Rheumatism	1	8
Rubella	3	31
Salpingitis	1	36
Scarlet fever	1	38
Septic finger	5	39
Septic toe	1	6
Tonsillitis	46	459
Urticaria	1	5
	128	1,739

One nurse developed an acute obsessional neurosis and was transferred to a mental hospital.

IMMUNIZATION OF NURSING STAFF.

108 nurses were Dick and Schick tested during the year 1937.

37 nurses were found to be Dick positive and 27 were immunized against scarlet fever. 10 nurses left before immunization was completed.

16 nurses were found to be Schick positive and were given three doses of toxoid antitoxin floccules. The nurses found to be Schick negative were given two doses of toxoid antitoxin floccules.

37 nurses were given T. A. B. vaccine by injection. Reactions were noted in 22 per cent.

16 nurses were given T. A. B. vaccine orally.

During the year 6 nurses developed diphtheria and 1 nurse developed scarlet fever.

Of those who developed diphtheria 5 were Schick negative and had had two 1 c.c. doses of toxoid antitoxin floccules. The other nurse was Schick positive and was in the process of being immunized when she developed the disease.

The nurse who contracted scarlet fever was Dick positive and had only had one immunizing dose of antiscarlatinal prophylactic when she developed the disease.

PUERPERAL SEPTIC INFECTION.

The number of admissions was 169, as against 206 in the previous year, showing a decrease of 37. 162 were discharged cured and 15 deaths occurred, giving a case mortality of 8.47 per cent. as against 7.4 per cent. during the previous year. Included in the 15 deaths are 5 cases in which death took place within 48 hours of admission; of which 1 occurred within 3 hours of admission, 2 within 12 hours of admission, and 2 within 36 hours of admission. If these 5 deaths are omitted the case mortality is 5.8 per cent.

The average stay in hospital of those who recovered was 21.8 days and of the fatal cases 13.2 days.

The average day of disease on admission to hospital was the 4th.

The case mortality from uterine sepsis was 7.9 per cent.

During the past year laparotomy was performed by the gynæcological surgeons in 7 cases. General peritonitis was present in all 7 cases, of which 4 were fatal.

Manual removal of placenta was performed in 30 cases, of which 14 were post-partum cases and 16 post-abortion cases.

Complications.

Acute nephritis	.. .. .	1
General peritonitis	.. .. .	7
Pelvic peritonitis	.. .. .	1
Pelvic abscess	.. .. .	2
Paralytic ileus	.. .. .	2
Pyo-salpingitis	.. .. .	3
Salpingo-oophoritis	.. .. .	1
Recto-vaginal fistula	.. .. .	3
Phlegmasia alba dolens	.. .. .	18
Mastitis	.. .. .	11
Puerperal insanity	.. .. .	2
Bronchitis	.. .. .	5
Pleurisy	.. .. .	6
Empyema	.. .. .	1
Lung abscesses	.. .. .	1
Lobar pneumonia	.. .. .	2
Broncho-pneumonia	.. .. .	1
Tonsillitis	.. .. .	2
Bacilluria	.. .. .	50
Weeping eczema	.. .. .	1
Bartholin's abscess	.. .. .	3
Influenza	.. .. .	3
Pericarditis	.. .. .	1

Clinical and Bacteriological Survey.

This survey is based upon an analysis of the 162 cases which were discharged and the 15 deaths during the year.

The 177 cases are made up as follows:—

Genital tract infections	.. .. .	168
Conditions other than puerperal sepsis	.. .. .	9

Of the puerperal sepsis group—

92 were post-partum cases (54·7 per cent.), and

76 were post-abortion cases (45·3 per cent.);

while the remainder constitute a miscellaneous group including cases of menorrhagia, pelvic abscess, scarlet fever, placenta prævia, leucorrhœa, gastro-enteritis, pleurisy, amenorrhœa, and mastitis.

Of the deaths—

12 were post-partum cases—mortality-rate 13·0 per cent.

3 were post-abortion cases—mortality-rate 3·9 per cent.

There were no deaths in the miscellaneous group.

The causes of death were :—

Post-partum cases—

Septicæmia	.. .. .	7
Peritonitis	.. .. .	2
Pneumonia	.. .. .	2

One case died from post-operative shock while still under the influence of an anæsthetic, the operation being manual removal of the placenta.

In this group, 5 cases had a hæmolytic streptococcal infection and 2 cases had an anærobic streptococcal infection.

Post-abortion cases—

Septicæmia with acute nephritis	.. .. .	1
Peritonitis	.. .. .	1
Peritonitis with septicæmia	.. .. .	1

Two of these cases had a hæmolytic streptococcal infection.

There were 4 primigravida in the 12 post-partum deaths.

There was 1 primigravida in the 3 post-abortion deaths.

Ætiology.

The figures relating to the following ætiological factors in puerperal sepsis were investigated for the purposes of this report :—

- A.—Seasonal incidence.
- B.—Special risk of infection.
- C.—Parity.

A.—Seasonal incidence was dealt with in two groups, representing—

- (i.) Gross seasonal incidence ; and
- (ii.) Seasonal incidence of hæmolytic streptococcal infections alone ;

and the following tables represent the contrasted percentage for the four quarters of the year :—

Season	Total Cases	Hæmolytic Streptococcal Infections
	Per cent.	Per cent.
January to March, 1937	17·75	16·12
April to June, 1937	26·0	22·58
July to September, 1937	35·5	19·35
October to December, 1937	20·75	41·95

B.—Special Risk of Infection.

Various conditions can be regarded as conducive to special risk of infection, and they may be divided into three broad groups:—

- (i.) Presence of a septic focus in the patient, her attendants, and the environment of the confinement—*i.e.*, her home surroundings.

An important source of infection is contact with an acute catarrh of the upper respiratory tract. Other septic foci are rhinorrhœa, otorrhœa, infectious diseases and skin diseases.

- (ii.) Presence of an ante-natal vaginal discharge.

- (iii.) Conditions arising during confinement, *e.g.*, exhaustion, bruising and lacerations of the genital tract, post-partum hæmorrhage, and internal manipulation.

Considering the post-partum cases only, out of the 92 cases, 42 cases or 45·6 per cent. were exposed to some special risk of infection. Of these 42 cases, 30 or 71·4 per cent., had suffered bruising and laceration of the genital canal of varying degrees during confinement.

Of the 12 fatal post-partum cases 11 were noted to have been exposed to some special risk, and 8 suffered severe lacerations and bruising during confinement.

From these figures it is seen that injury during confinement is a great potential source of infection, and though definite evidence is difficult to obtain, better ante-natal care in a certain number of the cases might have obviated this risk.

Owing to obvious difficulties the source of infection in post-abortion cases is difficult to trace, and no reliable figures can be quoted with regard to these cases.

C.—Parity.

There were 56 primigravidæ and 112 multigravidæ in this group of cases.

Of the primiparæ—

- 42 were post-partum cases, and
- 14 were post-abortion cases.
- 39 of the post-partum cases recovered.
- 3 of the post-partum cases died (7·1 per cent.).
- 13 of the post-abortion cases recovered.
- 1 of the post-abortion cases died (7·1 per cent.).

The 3 primiparous post-partum deaths represent 20 per cent. of the total mortality.

Clinical Classification.

The general classification of puerperal sepsis has been adhered to, and the total number of cases has been divided into four groups :—

- I. Infection limited to uterus, vagina, and perineum.
- II. Infection involving pelvic cellular tissue, pelvic peritoneum, tubes and ovaries.
- III. Infection of the birth canal associated with general peritonitis.
- IV. Infection of the birth canal associated with septicæmia.

Group I. comprised 139 cases. There were 2 deaths in this group, 1 case developing a lobar pneumonia shortly after admission. The other case died from post-operative shock whilst still under the influence of an anæsthetic, the operation being for manual removal of the placenta. Mortality-rate, 1·4 per cent.

Two cases in this group developed a mild form of puerperal insanity and were transferred to Crumpsall Hospital for mental treatment.

Group II. comprised 8 cases. There were no deaths.

Group III. comprised 7 cases :—

3 cases recovered.

4 cases died.

1 fatal case was associated with septicæmia.

Total deaths, 4. Mortality-rate, 57·1 per cent.

Group IV. comprised 14 cases :—

12 cases of hæmolytic streptococcal septicæmia.

5 recovered. 7 died.

2 cases of anærobic streptococcal septicæmia.

Both died.

Total deaths, 9. Mortality-rate, 64·3 per cent.

Source of Infection.

All cases admitted were questioned carefully to discover, if possible any likely source of infection. Such sources have been previously enumerated in the special risks of infection, and include the actual disease or recent contact with such diseases as catarrh of the upper respiratory tract, otorrhœa, boils, carbuncles, infectious diseases, dermatitis, sore throats, etc

The question of any ante-natal vaginal discharge was also carefully enquired into :—

8 cases gave a history of ante-natal vaginal discharge.

13 cases gave a history of recent contact with a case of acute catarrh of the upper respiratory tract in a member of the family.

2 cases had an advanced pyorrhœa.

3 cases gave a history of recent contact with a case of otorrhœa.

1 case gave a history of sore throat a few days prior to confinement.

1 case gave a history of recent contact with a case of scarlet fever occurring in her family.

1 case had a dermatitis.

In the 2 cases of pyorrhœa, the possibility of the pyorrhœa being the source of infection was strengthened by finding that the organism causing the uterine infection was identical with the organism causing the pyorrhœa.

Routine cultures of the throat, nose, and gums revealed in 19 cases a hæmolytic streptococcus similar, though not necessarily identical, with the organism found in the uterine culture.

Bacteriology.

Total cases 168

Hæmolytic streptococcal infection 32 (19·0 per cent.)

Non-hæmolytic streptococcal infection .. 136 (81·0 per cent.)

In the hæmolytic streptococcal group there were 8 deaths (25 per cent.).

In the non-hæmolytic streptococcal group there were 7 deaths (5·1 per cent.).

Last year cultures of hæmolytic streptococci grown from the uterine discharge of 18 cases of puerperal sepsis were sent to the Public Health Laboratory, York Place, Manchester, for type agglutination. The results showed that the strains causing puerperal sepsis did not belong to any one type, or even to any one limited number of types. This practice was discontinued this year, for, though the question of the different serological types of hæmolytic streptococci may be of definite academic importance, yet in the present state of our knowledge it is of no practical importance or use in treatment.

Treatment.

During the year 1937 a full clinical trial was given to the sulphonamide group of drugs in the treatment of cases of puerperal sepsis. Prontosil was used during the first half of the year and Streptocide in the latter half. The trial was not made to test the efficacy of any one sulphonamide preparation, but rather that of the group as a whole. All cases admitted were given sulphonamide tablets by mouth, the dose varying from 3 to 7 grammes per day according to the severity of the infection. In the cases of infection with the hæmolytic streptococcus treatment with sulphonamide was continued during their whole stay in hospital, a minimal dose only being given towards the end of the disease. In the cases due to organisms other than the hæmolytic streptococcus the sulphonamide was discontinued as soon as the results of the routine cultures were known, as the drug appears to be without effect on any organism other than the hæmolytic streptococcus.

Two groups of patients have been compared, representing the years 1936 and 1937. Both groups are identical in that they contain only cases of infection of the birth canal due to the hæmolytic streptococcus. The outstanding difference in the treatment in these two groups is that the sulphonamide preparations were used as a routine in the 1937 group, and not at all in the 1936 group.

RESULTS OF PUERPERAL INFECTION DUE TO THE HÆMOLYTIC STREPTOCOCCUS.

	1936			1937		
	No. of Cases	Deaths	Mortality Rate %	No. of Cases	Deaths	Mortality Rate %
(A) Total number of puerperal infections due to the hæmolytic streptococcus	44	6	13·6	32	8	25
(B) Number of infections limited to the birth canal	24	0	0	15	0	0
(C) Number of infections showing definite localised spread beyond the limits of the birth canal (excluding cases in which general peritonitis was also present)	9	0		4	0	0
(D) Number of infections in which the hæmolytic streptococcus was demonstrated in blood cultures (excluding cases in which general peritonitis was also present)	10	5	50	12	7	58·3
(E) Number of infections in which both septicæmia and general peritonitis were present	1	1	100	1	1	100

In the 1936 group the average stay in hospital in days in cases which recovered was 28·4, and in cases which died 10·1.

In the 1937 group the average stay in hospital in days in cases which recovered was 26·8, and in cases which died 5·3.

Before any comparison between the two groups can be made it must be mentioned that in the 1937 group of cases, 4 cases died within 48 hours of admission, no deaths occurring within this limit in the other group. No drug can be reasonably expected to alter the course of the disease in such cases, and if these cases are omitted the mortality-rate in the 1937 group (*a*) is 14·3. Of these four cases, three were in the septicæmic group (*d*) of cases for 1937, and if these are omitted the mortality-rate is 44·4 for this group.

The table shows that, provided the infection has not spread into the general abdominal cavity or the blood stream, the mortality-rate is nil. In the 1936 group the infection was limited to the birth canal in 55 per cent. of cases, whereas in the 1937 group it was only limited to 47 per cent., that is to say there was more local spread of the infection in the sulphonamide-treated group than in the other group. It must be pointed out, however, that this does not necessarily mean the failure of the drug to combat the infection, as it may be due to the relatively increased virulence of the organism.

The mortality rate in the septicæmic cases was practically the same in both groups.

The figures in this series of cases are too small to permit of any definite conclusion as to the value of sulphonamide in the treatment of puerperal sepsis, but, though the drug may have some beneficial effect on the disease, the results on the whole are disappointing. Certainly the sulphonamide drugs have not exerted the same definite action in the treatment of puerperal sepsis as they have in the treatment of other hæmolytic streptococcal infections, such as erysipelas, and it would seem that further factors are involved in puerperal sepsis other than the actual infection. One of these factors is undoubtedly trauma during confinement. It has been a constant finding during the year that patients who have been badly lacerated and bruised during labour have responded much less readily to treatment and with poorer results than those in whom the birth injuries were minimal.

Treatment by postural methods, by local irrigation and douching, and by blood transfusion has been continued, and as yet appear to be the most reliable and satisfactory methods of treatment in puerperal sepsis

LANGHO COLONY.

REPORT FOR THE YEAR ENDED 31ST DECEMBER, 1937.
BY DR. J. SHEARER, MEDICAL SUPERINTENDENT.

On the 31st December, 1937, there were maintained in the Colony 296 male and 331 female colonists, of whom 354 were chargeable to the Manchester Corporation and 273 to other authorities, as under :—

<i>County Boroughs.</i>					<i>County Councils.</i>				
Blackburn	..	..	..	10	Cheshire	..	..	..	2
Burnley	..	..	..	9	East Sussex	..	..	..	2
Bolton	..	..	..	11	Glamorgan	..	..	..	4
Bootle	..	..	..	5	Lancashire	..	..	..	111
Blackpool	..	..	..	4	Middlesex	..	..	..	7
Bradford	..	..	..	1	North Riding	..	..	..	1
Barrow-in-Furness	..	..	..	1	Surrey	..	..	..	9
Croydon	..	..	..	3	Salop	..	..	..	1
Exeter	..	..	..	1	West Riding	..	..	..	15
Ipswich	..	..	..	4					—
Liverpool	..	..	..	36					152
Newport	....	..	..	1					—
Oldham	..	..	..	3					
Preston	..	..	..	4					
Salford	..	..	..	21					
Warrington	..	..	..	5					
Wigan	..	..	..	1					
Wallasey	..	..	..	1					
				121					Total 273

The total number of seizures during the year was 39,558.

	Severe	Slight	Total	Average	Total Number Maintained
Male	14,286	5,029	19,315	60.0	322
Female	10,884	9,359	20,243	59.4	341
Total	25,170	14,388	39,558	59.7	663

Out of the total of 39,558 seizures, 79 colonists accounted for 12,494 which brings the average of the remaining 27,064 to 46.

A severe seizure is one in which the colonist has a typical epileptic fit, with twitching and loss of consciousness ; a slight seizure being one in which the colonist may only have a sensation accompanied by momentary loss of consciousness without twitching.

The following classification of the incidence of seizures is of interest :—

	Males	Females
Decreased incidence	81	81
Increased incidence	76	14
No change	104	159
No seizures during the year	44	31
Unclassified (including recent admissions)	17	56
	322	341

19 colonists died during the year. 10 colonists were transferred to Crumpsall Hospital for treatment, and 1 to Crumpsall Institution for observation. 1 was transferred to Christie Hospital for treatment, and 3 to Queen's Park Hospital, Blackburn.

There were three fractures during the year. One colonist sustained a slight shoulder injury when knocked down by a horse while working on the Farm.

The general health and physical condition of the colonists during the year was very good.

The employment of colonists on the 31st December was as follows :—

	Male	Female
Domestics—The Homes	109	170
„ —Administration block	12	28
Laundry	—	30
General kitchen	—	30
Sewing room	—	38
Engineering	6	—
Carpentry and masonry, etc.	8	—
Shoemaking	4	—
Tailoring	1	—
Barbering	1	—
Office and stores	6	—
Farm	22	—
Kitchen garden	8	—
Grounds and sports field	94	—
Sick and Unemployed	25	35
Total	296	331

Details of work done in some of the departments :—

	New Work	Repairs and Alterations
TAILOR'S SHOP—		
Uniform clothing	109	—
Colonists' clothing	—	1,097
Sundries	24	—
	133	1,097
SHOEMAKER'S SHOP—		
Boots, clogs, and slippers	212	2,835
Sundries	106	25
	318	2,860
SEWING ROOM—		
Clothing, outer	843	819
„ under	1,038	4,636
„ socks, stockings, etc. ..	356	7,748
Uniform	587	274
Farm, overalls, etc.	36	21
Bedding and linen	1,335	2,153
Rugs, carpets, etc.	20	6
Curtains	33	17
Tea cloths, towels, etc.	1,215	1,642
	5,463	17,316
Bunting	1,513 yards	—

At the farming year end, 31st March, 1937, the live stock on the Farm comprised :—

9 horses.
91 cows and bulls.
298 pigs.
2,699 poultry.

The total acreage farmed is $296\frac{1}{2}$ acres, of which 169 acres is pasturage, $99\frac{1}{2}$ acres is meadowland, and 28 acres is arable land.

During the year ended 31st March the Farm transferred or sold :—

51,402 gallons of Grade "A" milk.
144,374 hen eggs.
11,487 lb. poultry (3,829 head).
5,772 lb. beef (9 head).
70 live cattle.
2,399 lb. pork (13 pigs).
342 live pigs.
740 cwts. potatoes.
178 cwts. cabbage and sprouts.
56 cwts. turnips, etc.

In addition, the Farm produced for consumption by live stock :—

2,300 cwts. hay.
1,800 cwts. ensilage.
300 cwts. potatoes.

Recreation.

I would again stress the need for the provision of a separate recreation room for the male colonists for billiards, cards, etc., in order to relieve the overcrowding of the day-rooms in the evenings, which would be to the advantage of all concerned.

Scouts and Guides.

The scout crew continues to be active and progressive. Various items of furnishings have been made during the winter in anticipation of taking over the staff cycle shed as a scout hut. The crew numbers 16—14 of whom are second-class badge holders—and will be invested in the near future as fully-fledged Rovers.

The guides have very much appreciated the possession of the "Mary Dunn" hut, which, although small, has been a great help to the Company, which looks forward to an extension being made to the hut later on. Six guides have passed the test and enrolled as Rangers; badge work has been the chief item of interest, and the girls generally show a keen and active interest in the movement.

During the coming year both scouts and guides will be given an interest in outdoor life and camping on the colony properties.

Railway Halt.

The question of making a passenger halt for the colony for the use of visitors to colonists, staff, and visiting officials has been under consideration during the past year, but finance is the present difficulty. The railway company will only erect such a halt on condition that the Corporation defray the cost.

There is no bus route serving the road by the main entrance, the nearest point being about 25 minutes' walk and, in winter, conditions may be better imagined than described.

Staff Cottages.

The need for staff cottages is once more urged ; apart from the question of the small number of staff available in case of fire, and travelling conditions in winter, there is now the added item of " air raid precautions," which calls for a larger number of the male staff to be available at night-time, especially in the event of the 48 hours week being adopted.

ROSE HILL CONVALESCENT HOME.

REPORT FOR THE YEAR ENDED 31ST DECEMBER, 1937.

By MISS A. BALL, MATRON.

During the year 529 patients were admitted, including 170 babies under 5 years of age. 516 patients were discharged. These figures represent decreases of 102 admissions and 127 discharges as compared with 1936. The average number of beds occupied during the year was 89·36, an increase of 4·96 over last year.

On April 30th, 1937, the new scheme for admissions through the district medical officers became operative, and from that date to December 31st 57 children have been admitted (26 under 5 years, 31 over 5 years), and 52 discharged. The length of stay varied from 6 weeks to 5 months. These figures are included in the total admissions and discharges shown above.

The number of children nursed in bed for three or more days (not including heart cases) was 300. This figure includes 66 sore throats and 112 infectious diseases. Thirty-six of these infectious cases were transferred to other hospitals.

During the year 95 heart and rheumatism cases were nursed in the Home.

Patients attending the surgery for treatment during the year were :—

Ear cases	39
Eye cases	40
Skin cases	71
Minor ailments	602
	—
Total	752
	—

We have again sent a large number of swabs to Crumpsall for examination.

Staffing.

- 3 sisters.
- 5 assistant nurses.
- 4 attendant nurses.
- 4 junior nurses.

During the year 6 junior nurses were appointed to other hospitals for further training.

Sickness of Resident Staff.

One sister was absent for 4 days, four nurses for 33 days, and two domestics for 11 days ; a total of 48 days.

Sickness of Non-resident Staff.

Members of the teaching staff were absent for 31 days, laundry staff 108 days, and cleaners 33 days during the year ; a total of 172 days.

Cinematograph entertainment has been continued, and, in addition, a series of lantern lectures have been given to the children throughout the winter months. The voluntary services of the lecturers have been greatly appreciated.

Scouts, Manchester 2273.

The Scout and Cub Movement is still progressing in the Home, chiefly under the direction of Mr. H. James, Commissioner for Handicapped Scouts, and Mr. R. Lupton, Scout Master.

On June 20th the Commissioners and Officers of the South-East Lancashire Division presented colours to our troop. The presentation and dedication services were held in the chapel.

Guides, 5th Wythenshawe.

In February, 1937, a Guide Company and Brownie Pack were formed.

On June 12th twelve guides visited Belle Vue Guide Rally and were presented to Lady Baden Powell.

School.

The gardens provided for the children in 1936 continue to be a source of interest and occupation.

Improvements.

A new building has been erected and attached to the open-air school, providing special lavatory and washing accommodation for the babies.

A new shelter has been built to accommodate children accompanying parents when visiting this Home.

A new incinerator and a new refrigerator have been installed.

The boys' bathroom has been tiled and rearranged.

Seven extra radiators have been installed in the wards.

WITHINGTON HOSPITAL.

REPORT FOR THE YEAR ENDED 31ST DECEMBER, 1937.

BY M. GAMBLE, M.D., MEDICAL SUPERINTENDENT.

1937 was the first full year when Gorton and Openshaw patients were not admitted to this hospital, but in spite of this curtailment of our admission area, the admissions fell by only 167—less than 2 per cent.

Increases are recorded in the work of all the sections of the hospital. More than 4,000 patients have received treatment at the casualty department, physiotherapy department, diabetic clinic, etc., and the increases in these sections have more than offset our slight decrease in admissions. In this connection I would stress that all the costs incurred in treating these patients are included in the costs of the hospital, and since the cost per patient-day is based upon in-patients only, that figure is proportionately and to this extent fallaciously increased.

There have been many periods of the year when the accommodation, particularly for women tuberculosis cases, has been overtaxed. The closing of wards for alterations has in some measure added to the difficulty, but there are some 20 classifications of patients in 36 wards. As the majority of the wards have at least 32 beds in each, it is not an easy task to alter classifications according to the prevailing demand.

Staff.

Dr. G. W. Fitzgerald, the senior gynæcologist and obstetrician, retired on superannuation after 18 years of excellent and devoted service.

Dr. J. W. A. Hunter was appointed to succeed him, whilst a third consultant gynæcologist and obstetrician was appointed at the same time.

Dr. J. M. Greenwood, the deputy medical superintendent, was successful in securing the Diploma in Public Health. The Chartered Society of Massage and Medical Gymnastics invited me to become a Vice-President of the Society, and I accepted.

Dr. Jane B. Stubbs, the resident obstetrical officer, left us during the year, being successful in securing another appointment under the Corporation.

Medical.

The purchase of an electro cardiograph has enabled more accurate diagnoses of heart cases to be made, and the apparatus has been well used during the short time it has been here.

In the treatment of diabetes mellitus the zinc insulin has superseded the older type. The most useful feature of the new insulin is that the effects are continued over a longer period, maintaining the blood sugar at a more constant level.

Since the pathological laboratory has been located here, we have been able to get pneumonia cases "typed" early, and to use the appropriate anti-pneumococcal serum with marked success.

The removal of mental cases from the hospital to the Crumpsall Institution is now undertaken by a general relieving officer, an arrangement which has proved quite satisfactory.

Surgery.

The surgical section of the hospital has had a busy year, the operations performed totalling 2,657, of which 1,376 were of a major character. In the tables quoted on another page (which are based on the annual returns to the Ministry of Health), only operations under a general anæsthetic are quoted. This is extremely misleading, as more and more major operations are now being done under spinal anæsthesia.

Many emergency operations are now done during the night time, and a special theatre staff has been delegated for this work.

The new operating block, referred to in last year's report, has been satisfactory, and, although it gave us three additional theatres, we have used them all regularly. There are now nine routine operating sessions weekly, by the consultants, in addition to the radium therapist, who visits once monthly. Further sessions by visiting anæsthetists are to be arranged.

Orthopædic.

Many fractures are now being treated. A fracture clinic is held daily by a senior resident officer, and a weekly clinic is held by the consultant. Although handicapped by lack of accommodation and clerical staff, much excellent work has been done in this clinic. A system of records has been introduced which should prove of great value, and the following list of fracture cases discharged may be of interest :—

Site of Fracture	Cases Discharged
Clavicle	33
Scapula	7
Humerus	33
Radius	48
Ulna	9
Radius and ulna	31
Carpus	6
Metacarpals and phalanges	25
Spine	10
Pelvis	8
Face	7
Femur	44
Tibia	15
Tibia and fibula	34
Ankle (Pott's)	13
Fibula	10
Patella	12
Foot	23
Miscellaneous (ribs, etc.)	68

Obstetrics and Gynæcology.

Probably this section of the hospital has been the subject of more administrative work than any other, largely by reason of additional legislation in the form of Section B of the Midwives Act relating to the training of pupil midwives, and also because we are now training pupil midwives in the administration of gas and air by an approved apparatus, certificates being issued to qualified nurses.

The new Section B of the C.M.B. Rules provides that the training of pupil midwives shall be divided into two parts. The first period of training will be taken at a hospital dealing with at least 500 cases per annum and will occupy six months. The second period of training, essential for practising midwives, consists mainly of district work, and will occupy a further six months. Its aim is to give the midwife an opportunity to put her knowledge into practice and to acquire the ability to take responsibility and to co-operate with local authorities.

During the year application was made to have the hospital recognised for Part I. of the training.

One of the maternity sisters was granted leave of absence to take a maternity teacher's course, which she passed successfully, and we now have two maternity teachers on the staff. Certain other additions will have to be made before the Central Midwives Board will approve us for the first period of training under Section B.

The total deliveries was slightly in excess of last year, while the clinics, both ante- and post-natal, showed excellent attendances. More than 10,000 attendances were made by expectant mothers in 1937.

The question of providing cubicle accommodation for complicated maternity cases was the subject of much discussion, and late in the year plans were formally approved for the alterations required.

Radium Therapy.

This is carried out in conjunction with the Radium Institute, and during the coming year (1938) it is anticipated that all adult cases requiring radium treatment will be located at this hospital, instead of being partly at Crumpsall.

Deep X-ray therapy has been used more extensively during the past year, consequent upon the extension of the agreement existing between the Corporation and the Radium Institute.

Seven sessions were held here by the radium therapist in 1937, and some 12 cases received treatment.

The gynæcologists have also used radium in the treatment of dysfunctional hæmorrhage.

Physio-therapy Department.

A short-wave diathermy machine was purchased during the year and more than 500 treatments were given. Cases treated include septic conditions such as mastitis, boils, carbuncles, suppurating glands, etc., and also sciatica, lumbago, bronchitis, unresolved pneumonia, and some types of joint affections. The value of this machine compared with the older type is that it has a more penetrating effect and treatments are much shorter, and that the patient in many instances can have the treatment without the necessity of removing all clothing.

A modern treatment table was purchased to replace a worn-out model.

Physio-therapy Clinics.

Five sessions for after-care patients are held weekly—three for adults and all cases of trauma; and the other two for children, most of whom suffer from congenital deformities or other crippling conditions of childhood. The assistance of the hospital almoner is very much appreciated by patients attending these clinics.

Baby Clinics.

Children treated	53
Attendances	827

The following table gives the number of patients seen and treated in the *After-Care Clinics*.:—

	Physio-therapy	Sunlight
Number of patients seen	995	173
Number of attendances	15,931	2,787
Number of treatments given	22,376	3,452

In-patients.

During the spring several patients suffering from hay fever were treated by nasal ionisation, which gave very good results.

The following table relates to *in-patients* treated during the year :—

	Physio-therapy	Sunlight
Total number of attendances	10,262	3,040
Treatments	15,431	3,714

X-ray Department.

The number of X-ray examinations made during 1937 totalled 6,061. Of this number, no fewer than 1,138 were at the request of the casualty ward. Seven sessions are held weekly in the X-ray department.

Ear, Nose, and Throat Department.

The work of this section showed a very large increase during the year. The consultations in the dark room totalled 1,040, compared with 782 for 1936, whilst the number of operations carried out was 261, compared with 61 during the previous year. The ear, nose, and throat consultant is to be allotted another session to cope with the growth of this work.

Eye Department.

Sessions were held weekly during the year, and 363 ambulatory cases were seen. In 58 cases spectacles were ordered.

Pathological Department.

During 1937, the old operating theatre was converted into a temporary pathological laboratory, to serve the growing needs of the hospital and to save the delay and inconvenience occasioned by sending specimens to the central laboratory at Crumpsall.

Work in the laboratory started about October 1st with a staff consisting of a full-time pathologist, a senior technician, a female technician for special work, a junior technician and a clerk, with the Director of Pathological Services available for consultation. In the three months from the time of opening to December 31st, 3,570 specimens were examined and the laboratory is now able to deal with nearly all the requirements of the hospital.

Already the speeding up of the service and the advantage of having the laboratory staff near at hand for consultation has fully justified the establishment of the department.

Nursing Staff.

Difficulty was again experienced in obtaining nursing staff, particularly probationer nurses, the position being little changed from last year.

It would appear that we should interest prospective staff immediately they leave school, as, if they are not eligible until they reach the age of 19 or 20 years, their interests are taken up elsewhere. A preliminary training school would help to bridge this gap.

The health of the nursing staff has been good, and no epidemics occurred. Ninety-two members went off sick during the year, each with an average incapacity of three weeks.

I am pleased to record the success of the tennis team in the inter-municipal hospital competition for the Laski Cup, which they were successful in winning. In the competition open to all the city hospitals, our team was narrowly beaten in the final.

Alterations and Additions.

Wards 5B and 5C were reconstructed during the year, and there are now two main surgical blocks close to the new operating block. Each block consists of three wards of 32 beds each. The wards are exceptionally bright and cheerful, and are a credit to the hospital. It is hoped that financial stringency will not impede the reconstruction of the other wards on similar lines.

The automatic lift for conveying food trucks from the level of the main corridor to the kitchen has been a great improvement, and has helped to eliminate much of the noise in the corridor.

A large amount of painting has been undertaken during the year, and a patient's first impression of the hospital is distinctly more pleasant and cheerful than before.

The conversion of the old disused dining hall into a staff recreation room was commenced towards the end of the year, and will prove a valuable addition to the hospital.

The reconstruction of the main building has been further completed and the accommodation for nurses is now greatly improved. Additional rooms have been provided by appropriating the quarters formerly occupied by the resident clerical staff.

Casualty Department.

A further large increase in the number of cases was recorded in 1937, no fewer than 2,359 patients being treated. Of this number, 555 were brought in by the police, largely from road accidents. The month of August brought the highest figures for the year.

The number of fracture cases treated rose to 371, and of this number 263 were able to return home after treatment, to attend again at intervals. Road accidents were responsible for 149 fracture cases treated.

A summary of the year's work is given, including a separate statement relating to accidents involving fractured bones.

STATISTICS RELATING TO PATIENTS TREATED IN THE CASUALTY DEPARTMENT DURING THE YEAR 1937.

ALL CASES—2,359 (excluding 13 patients brought in dead).

Age Groups—

Under 5	..	..	..	..	..	..	..	240
6—10	..	..	..	..	..	..	..	237
11—15	..	..	..	..	..	..	..	269
16—25	..	..	..	..	..	..	..	470
26—40	..	..	..	..	..	..	..	600
41—50	..	..	..	..	..	..	..	229
51—60	..	..	..	..	..	..	..	172
61—70	..	..	..	..	..	..	..	99
71—80	..	..	..	..	..	..	..	40
Over 80	..	..	..	..	..	..	..	3

Sex—

Males	..	..	..	..	..	..	..	1,509
Females	..	..	..	..	..	..	..	850

Numbers brought in by—

Police	..	..	..	..	..	..	..	555
Privately	..	..	..	..	..	..	..	1,791
Otherwise	..	..	..	..	..	..	..	13

Numbers Admitted during each Calendar Month—

January	..	..	..	..	..	..	..	140
February	..	..	..	..	..	..	..	133
March	..	..	..	..	..	..	..	176
April	..	..	..	..	..	..	..	201
May	..	..	..	..	..	..	..	204
June	..	..	..	..	..	..	..	222
July	..	..	..	..	..	..	..	221
August	..	..	..	..	..	..	..	246
September	..	..	..	..	..	..	..	201
October	..	..	..	..	..	..	..	221
November	..	..	..	..	..	..	..	189
December	..	..	..	..	..	..	..	205

Day of Week Admissions—

Sunday	..	..	..	..	..	..	..	255
Monday	..	..	..	..	..	..	..	391
Tuesday	..	..	..	..	..	..	..	354
Wednesday	..	..	..	..	..	..	..	327
Thursday	..	..	..	..	..	..	..	317
Friday	..	..	..	..	..	..	..	331
Saturday	..	..	..	..	..	..	..	384

Four-hourly Incidence of Admissions—

Midnight—4-0 a.m.	..	..	..	..	..	47
4-0 a.m.—8-0 a.m.	..	..	..	..	..	26
8-0 a.m.—12-0 noon	..	..	..	..	..	767
12-0 noon—4-0 p.m.	..	..	..	..	..	601
4-0 p.m.—8-0 p.m.	..	..	..	..	..	538
8-0 p.m.—midnight	..	..	..	..	..	380

Discharge Details—

Discharged within 12 hours	2,253	} 2,359
Detained over 12 hours	106	
Admitted to Withington Hospital	235	
Transferred to other hospital	72	
Died in casualty ward	9	

Road Accidents involving Motor Vehicles 304

Numbers brought in by—

Police	248
Privately	54
Otherwise	2

Class—

Pedestrians	83
Motorists	56
Cyclists	123
Passengers	42

Numbers admitted during each Calendar Month—

January	19
February	22
March	15
April	27
May	28
June	24
July	34
August	36
September	22
October	19
November	21
December	37

Day of Week Admissions—

Sunday	36
Monday	43
Tuesday	36
Wednesday	41
Thursday	37
Friday	49
Saturday	62

Four-hourly Incidence of Admissions—

Midnight—4-0 a.m.	8
4-0 a.m.—8-0 a.m.	9
8-0 a.m.—12-0 noon	57
12-0 noon—4-0 p.m.	59
4-0 p.m.—8-0 p.m.	80
8-0 p.m.—12-0 midnight	91

Discharge Details—

Discharged within 12 hours	254	} 304
Detained over 12 hours	50	
Admitted to Withington Hospital ..	82	
Transferred to other hospital	10	
Died in casualty ward	4	

<i>Road Accidents not involving Motor Vehicles</i>	..	..	..	330
<i>Numbers brought in by—</i>				
Police	..	..	..	122
Privately	..	..	..	208
Otherwise	..	..	..	—
<i>Discharge Details—</i>				
Discharged within 12 hours	..	..	314	} 330
Detained over 12 hours	..	..	16	
Admitted to Withington Hospital	..	..	36	
Transferred to other hospital	..	..	9	
Died in casualty ward	..	..	2	
<i>Industrial Accidents</i>	..	..	..	341
<i>Age Groups—</i>				
11—15	..	..	..	18
16—25	..	..	..	106
26—40	..	..	..	148
41—50	..	..	..	46
51—60	..	..	..	21
61—70	..	..	..	5
71—80	..	..	..	—
<i>Sex—</i>				
Males	..	..	..	280
Females	..	..	..	64
<i>Brought in by Police</i>	..	..	..	20
<i>Day of Week Totals—</i>				
Sunday	..	..	..	14
Monday	..	..	..	57
Tuesday	..	..	..	67
Wednesday	..	..	..	59
Thursday	..	..	..	63
Friday	..	..	..	51
Saturday	..	..	..	33
<i>Domestic Accidents—</i>	..	..	..	535
<i>Day of Week Totals—</i>				
Sunday	..	..	..	63
Monday	..	..	..	91
Tuesday	..	..	..	82
Wednesday	..	..	..	78
Thursday	..	..	..	88
Friday	..	..	..	70
Saturday	..	..	..	63
<i>Sports Accidents</i>	..	..	..	103
<i>Accidents at Play (Children)</i>	..	..	..	255
<i>Day of Week Totals—</i>				
Sunday	..	..	..	37
Monday	..	..	..	46
Tuesday	..	..	..	32
Wednesday	..	..	..	43
Thursday	..	..	..	24
Friday	..	..	..	39
Saturday	..	..	..	34
<i>Transferred to other Hospitals</i>	..	..	..	12

Attempted Suicide 18

Sex—

Males 7
Females 11

Age Groups—

Under 5 —
6—10 —
11—15 —
16—25 2
26—40 5
41—50 7
51—60 2
61—70 2
71—80 —
Over 80 —

Brought in by Police 15

Discharge Details—

Discharged within 12 hours 15 }
Detained over 12 hours 3 } 18
Admitted to Withington Hospital .. 3
Transferred to other hospital 3
Died in casualty ward 8

Other Accidents 319

Sudden Illness 146

In street 55
At home 46
At premises other than home 45

Brought in by Police 65

Discharge Details—

Discharged within 12 hours 136 }
Detained over 12 hours 10 } 146
Admitted to Withington Hospital .. 42
Transferred to other hospital 7
Died in casualty ward 3

Brought in Dead 13

Accidents—

Road accidents involving motor
vehicles —
Road accidents not involving motor
vehicles —
Industrial 2
Domestic —
Sport —
At play (children) —
Suicide —
Other 4

Sudden Illness—

(a) In street 3
(b) At home 2
(c) At premises other than home .. 2

ADDENDUM.

ACCIDENT STATISTICS INVOLVING FRACTURES.

Type of Accident—

Road—Motor vehicle involved	68
Road—Motor vehicle not involved	81
Industrial	40
Domestic	59
Sport	41
At play (children)	64
Other accidents	18
	— 371

Discharge Details—

Discharged within 12 hours	342	} 371
Detained over 12 hours	29	
Admitted to Withington Hospital	65	
Transferred to other hospital	19	
Died in casualty ward	4	

Brought in by—

Police	109
Privately	258
Otherwise	4

Sex—

Males	247
Females	124

Age Group—

Under 5	36
6—10	51
11—15	53
16—25	55
26—40	72
41—50	45
51—60	36
61—70	18
71—80	4
Over 80	1

Almoner's Report.

The work of the social service department has continued on the same lines, though inadequate clerical help and increased out-patient assessment duties have made new developments impossible.

During the year, the Institute of Hospital Almoners have sent four students for varying periods of training, and three, studying for the B.A. (Admin.) degree, have come from the Manchester University to learn something of medico-social work.

The increasing number of enquiries and reports about patients from outside organisations make it evident that the department is appreciated not only within the hospital bounds. This close co-operation with other social workers is of great benefit to those patients who are faced with social problems arising out of their illness, and who would not know where to turn for assistance without the guidance of the almoner.

The greatest problem is to find suitable conveyances to bring out-patients up to hospital for treatment, when their disability makes a journey by tram out of the question. Voluntary help cannot always be relied upon, and it would be an invaluable service if arrangements could be made for an ambulance to make a round of calls on certain days of the week, and bring several patients up to hospital and take them home again after treatment.

The following figures represent as far as possible the activities of the department during the year, though it is not possible adequately to show in statistical form the value of work of this kind, where the human relationship is all-important.

Social Work of the Almoner.

	Number of Cases		
	1935	1936	1937
Convalescent treatment arranged—			
Per Public Health Department	78	72	43
Per Outside Agencies (20 different homes having been used to suit the individual needs of each patient) ..	142	207	169
Grants obtained for fares	11	120	128
Grants obtained for surgical appliances ..	13	37	17
Extra nourishment and assistance with special diets obtained	8	25	43
Clothing supplied	10	12	13
Conveyance in cars arranged	3	10	10
Homes visited	—	17	37
Unmarried mothers seen and advised ..	—	55	72
Helped in other ways	2	13	35

	Number of Cases		
	1935	1936	1937
Outside Agencies from which assistance has been obtained—			
Approved Societies	—	107	63
City League of Help	—	10	5
Cotton District Convalescent Fund ..	—	12	3
District Provident Society	—	24	24
Ex-Servicemen's Funds	—	39	36
Hospital and Convalescent Homes Funds	—	40	44
Manchester Corporation — Other Departments	—	68	91
Moral Welfare Associations.. .. .	—	39	45
Voluntary Unofficial Aunts.. .. .	—	10	6
Unemployment Assistance Board ..	—	6	6

Also : Blind Aid Society, Crippled Children's Help Society, Invalid Children's Aid Association, Poor Man's Lawyer, Police Court Missionary, Surgical Aid Society.

ASSESSMENT OF OUT-PATIENTS	1935	1936	1937
	Per cent.	Per cent.	Per cent.
Paying part cost of treatment	39	33	30
Contributing to Hospital Funds	21	26	26
Unable to pay	36	37	38
Motor accident claims and others	4	6	6

RECEIPTS	1935	1936	1937
	£ s. d.	£ s. d.	£ s. d.
Out-patients' payments	157 7 7	256 6 2	260 10 7
Grants from Hospital Funds	105 6 0	398 14 0	319 5 6
Grants for surgical appliances ..	15 8 3	31 11 7	77 2 6
*Motor accident claims and others..	215 4 0	45 15 6	47 13 6
	£511 2 10	£732 7 3	£706 12 1

* The majority of motor accident claims are now paid to the Claims Department, All Saints, so no comparison can be drawn.

CRUMPSALL INSTITUTION.
 WITHINGTON INSTITUTION.
 SWINTON HOME.

These institutions are administered by the Public Health Committee on behalf of the Public Assistance Committee in pursuance of the City Council's administrative scheme under the Local Government Act, 1929. The 1,999 beds at Crumpsall Institution include 660 beds for mental patients, the remainder being the ordinary provision for persons requiring institutional relief. At Withington Institution the whole of the 1,200 beds are provided for persons requiring institutional relief, but, at the present time, a considerable number of beds, usually about 600, are used for the accommodation of chronically sick persons for whom there is no accommodation available in the adjoining hospital. The 130 beds at Swinton Home comprise 122 beds for certified mental defectives (61 of each sex), and eight "observation" beds in which patients can be retained pending certification or for temporary treatment only.

In this report, the work done at each institution is the subject of a separate section and, as a period of more than seven years has now elapsed since the three establishments came under the present administration, it has been considered appropriate to review the events of this period as a whole and to include for comparison a brief review of the growth of Withington and Crumpsall Institutions throughout the previous administrative era, *i.e.*, the days of the former Board of Guardians.

Crumpsall Institution.

The present Crumpsall Institution was originally the Crumpsall Workhouse and the building of it was begun in 1855. The first paupers were admitted in August, 1858. Three blocks of buildings (A, B, and C blocks) constituted the workhouse. The occupants consisted of able-bodied and infirm men and women, children and imbeciles. It has been recorded that in the early days hardly a day passed without the necessity for calling in police to quell disturbances in the institution, and it appears that the cells (now disused) were almost always occupied by unruly paupers.

The type of inmate improved progressively in the latter part of the 19th century and the disturbances became less frequent. Coincidentally, the provision made for the paupers in the workhouse improved, and it is a fair conjecture that the two improvements were related.

Because of the growing numbers of able-bodied men chargeable to the Guardians, a new block was built in 1906 and occupied in 1907. (During the Great War period, owing to the pressure of hospital beds,

this building was occupied by tuberculous patients. Since the war it has housed infirm patients.)

In 1910 the overcrowded state of the institution again made it necessary to build and the present “ D ” block was built. It was occupied in 1911 by infirm inmates.

In 1915 the Board of Guardians (Manchester, South Manchester, and Prestwich) were amalgamated into the Manchester Union. Shortly after this amalgamation, the Guardians decided to treat all Manchester mental patients in the institution. “ D ” block was accordingly cleared of its infirm inmates and was allocated specifically to mental patients.

The withdrawal of able-bodied persons from institutions, a process which has spread over a number of years, culminated recently in the transfer of these persons to the care of the Unemployment Assistance Board, who now maintain them outside the institution, and, with the removal of the last of them, Crumpsall Institution has become the City’s principal establishment for aged and infirm persons of both sexes, mental patients, and healthy children of nursery age.

The number of beds at present provided and their allocation to the various types of inmate is as follows :—

Type of Inmate	Number of Beds		
	Male		Female
Aged and infirm	916		316
Mental	356		310
Females not infirm	—		50
Mothers in nursery	—		16
Children in nursery		20	
Receiving wards	5		10
Grand Total .. .. .	.. ..	1,999	

The institution was taken over by the Corporation on April 1st, 1930, on the abolition of the Board of Guardians under the Act of 1929. At the time of the transfer the institution still included within its administrative purview the wards and departments for the treatment of the sick which had grown up during the preceding era, and which, in 1930, constituted in themselves a complete “ acute ” general hospital, adjacent to the institution proper. Since April 1st, 1930, the hospital has been

run as a Public Health Hospital in accordance with the City Council's "declaration" under the Act of 1929, but it was not until April 1st, 1934, that complete administrative separation of the hospital from the institution was effected. On the latter date, the hospital was placed under the administrative supervision of a medical superintendent responsible to the Public Health Committee and a house sub-committee.

The institution remains a Public Assistance Institution, the administration of which on behalf of the Public Assistance Committee has been delegated by the Council to the Public Health Committee.

The principal changes which have taken place in the internal organisation of the institution since 1930 have been limited to the separation from the hospital, the introduction of new accounting methods, the substitution of paid labour for inmate labour in many cases, and the development of medical and nursing services for sick inmates. Structural improvements of more or less major importance have been carried out during the period, notably the provision of new kitchens and dining rooms for the various grades of staff, the provision of a kosher kitchen for the benefit of members of the Jewish faith, and a laundry extension. An important improvement for which plans are now being prepared is the entire renovation of the living quarters of the resident female staff.

On the medical side mention may be made of the provision of a fully-equipped clinic and dressing station at which sudden illness or minor ailments in inmates can be dealt with expeditiously, without need for transferring the patients to hospital. Sunlight and radiant heat treatment has been made available. A chiropodial clinic has been instituted and the results of this have been highly satisfactory. In the mental wards a whole-time medical officer has been appointed and a psychiatric clinic has been established for the after-care and treatment of mental patients after discharge.

It will be realised that this account cannot contain a record of every minor change in structure, equipment, and staff which has occurred at the institution during the past seven years.

Much progress has been made, however, in brightening the institution wards and departments. Furniture of modern design has already been supplied in many parts of the institution, including armchairs and fireside chairs in bright colours. This policy will be continued until, finally, it is hoped all the "old-style" furniture will have been replaced. Radio is now provided in every department. A complete sound-cinema apparatus has been installed, and shows are given twice weekly during the winter months.

Statistics relating to the number of persons admitted and discharged during the calendar year 1937 are appended :—

	CRUMPSALL INSTITUTION—1937		
	Mental Wards	Other Wards	Totals
Admissions	844	757	1,601
Discharges	375	836	1,211
Deaths	241	10	251
Number of mental patients discharged to mental hospitals ..			240
Number of mental patients attending psychiatric clinic			74
Number of attendances at psychiatric clinic			208

Withington Institution.

In the year 1853 the Board of Guardians of the Chorlton Union found their workhouse in Stretford Road to be inadequate for the requirements of the Union, and, as extension was impossible, owing to the workhouse being closely surrounded by other buildings, the Guardians acquired the site of the present Withington Hospital and Institution, where they erected a workhouse, with hospital accommodation in addition, at a cost of approximately £45,000. The staff of the workhouse at its opening consisted of a visiting medical officer, a master, matron, chaplain, schoolmaster, schoolmistress, two nurses, and twelve other employees. Although many complaints were made by the ratepayers in 1855 of alleged over-building by the Guardians, it became necessary as early as 1866 to build additional hospital accommodation. Again, in 1878, further accommodation was required, and in 1881 the children were removed from the workhouse to new homes built on the other side of Nell Lane. These homes were occupied by the children until 1897, when the children were removed to the Cottage Homes at Styal.

The Withington Institution as it is known to-day dates from 1897. It then comprised six small homes and two schoolrooms, these latter being subsequently converted into wards for the chronic sick, while five of the six homes were enlarged for accommodating healthy aged persons. During the next ten years four more homes were erected—two for the healthy aged and two for the chronic sick.

During the Great War, owing to pressure of accommodation, the healthy inmates were transferred to the hospital side in the building now known as Nurses' Home No. 4, but after the war (in 1920) all the inmates were returned to the institution, with the exception of the children in the nursery.

During the ten years 1920–1930 the occupancy of the institution remained almost stationary, as the following figures show :—

TYPE OF INMATE	1921	1930
Healthy and convalescent	69	60
Aged and infirm	624	597
Chronic sick	359	361
Nursery	31	22
Totals	1,083	1,040

On April 1st, 1930, the Public Health Committee began their administration of the institution and, as at Crumspall, changes in organisation occurred. Administrative separation, a new system of accounting, and new visiting regulations were among them.

Building work was undertaken, including the erection of new sanitary annexes to the infirm wards, the conversion of one of the homes into staff quarters, and the general renovation of the establishment. In particular, two homes for healthy inmates were modernised and adapted for the accommodation of the chronic sick—an alteration which has afforded the most valuable relief to the adjoining hospital in times of pressure.

The roads in the institution have received special attention. Forbidding gates and railings have been taken down and the frontage and the spaces between the homes have been opened out and planted with flowering trees and shrubs.

At this institution, also, a chiropodial clinic has been instituted with excellent results. The installation of automatic telephone equipment has greatly facilitated the work of the staff.

There has been here, as at Crumspall, a diminution in the number of inmates able to assist in the work of the institution, but there still remains a number who can and do assist, some as messengers and others in the various special departments, *e.g.*, farm, gardens, stores, laundry, sewing-room, shoemaker's and tailor's shops, etc.

A number of male post-encephalitis lethargica patients have been transferred from the hospital to the institution and everything is done for their comfort. They have their own playing field, they go to the cinema twice weekly, and recently they had their first outing to the seaside—an event which it is hoped will take place annually.

Again, as at Crumpsall, radio sets have been provided in each ward and department, and in the chronic sick wards a plug is fitted beside each bed.

Changes which are under consideration at the present time are the conversion of another home for the use of the chronic sick, and the provision of a new sorting room at the institution laundry (to cope with the extra laundry work caused by the increased number of sick patients).

Much useful work is being done in modernising furniture and equipment. An innovation which has been well received is the provision of modern, brightly coloured garments for the children in the nursery, to replace the drab and stereotyped apparel of the past.

It is interesting to compare the occupancy of the institution beds in 1937 with that of 1930. The following table illustrates the way in which the institution has changed over in seven years from an establishment used mainly by the indigent aged to an establishment which is in reality an important chronic hospital:—

TYPE OF INMATE	1930	1937
Healthy and convalescent	60	—
Aged and infirm	597	362
Chronic sick	361	*661
Nursery	22	64
Totals	1,040	1,087

* Includes post-encephalitic patients.

Going still further back, the following comparison of percentage occupancy in 1937 with that of 1910 emphasises even more strongly the great change in function of Withington Institution during the last generation:—

TYPE OF INMATE	1910	1937
	%	%
Able-bodied	28.5	Nil
Aged and infirm.. .. .	52.75	33.25
Chronic sick	3.5	60.75
Nursery	1.5	6.0
Imbeciles	13.5	Nil
Epileptics	0.25	Nil
Totals	100.0	100.00

Admissions, discharges, and deaths during the year 1937 were as follows :—

Admissions	.. .. .	976
Discharges	.. .. .	824
Deaths	.. .. .	191

Attention is particularly directed to the development of Withington Institution into a most valuable adjunct to the hospital service of the City by reason of the “ swing-over ” of the type of inmate from the aged and infirm type to the chronic sick type during the past 27 years, and more especially during the past seven years. The relief afforded to Withington Hospital by reason of the acceptance by the institution of an increasing number of chronic sick has been of inestimable value, and this relief has, moreover, been given without in any way interfering with the function of the institution as a place for the reception of other types of inmate—the demand for beds for the other types having fallen by natural process during the period under review.

Swinton Home.

When the Swinton Home came under the control of the Public Health Committee on April 1st, 1930, its accommodation was officially stated to be 144 beds. The Home discharged the function of a Public Assistance Institution, but the children maintained in it were, in most cases, certified mental defectives, and, in all cases, children requiring supervision because of mental instability in more or less degree. The Home continued without administrative change until 1934, when a certificate was obtained from the Board of Control approving the Home as a recognised establishment for the reception of mental defectives under the Mental Deficiency Act, 1913. It was a condition of the Board's approval that the accommodation of the Home should not exceed 130 beds, comprising 61 beds for certified boys under the age of 16, 61 beds for certified girls under the age of 16, and 8 beds to be used for the accommodation of children prior to certification.

Upon this recognition being obtained, steps were taken by the Public Health Committee to transfer the liability for the cost of maintaining most of the children in the Home to the Mental Hospital Authority for the area, *i.e.*, the Lancashire Mental Deficiency Acts Committee. For

three years this Committee have paid the Corporation at the rate of 27s. 6d. per week for each child admitted to the Home on their order, but quite recently, on an appeal being made by the Corporation, the Board of Control and the Minister of Health have decided that the Lancashire Committee must pay to the Corporation the whole of the costs incurred in the maintenance of such children. The successful issue of these protracted negotiations means that a sum of approximately £8,000 per annum, formerly borne by the Public Assistance Committee for the maintenance of these children, is now the liability of the Lancashire Committee.

Since the transfer of 1930 the staff of the Home has not been materially altered, except in the special school which is maintained there. The school staff has been reorganised and supplemented. Extra assistance has this year been given to the school staff in the supervision of children in school. New and modern school furniture has been provided and the school premises have been generally renovated.

Playing grounds at the Home have been resurfaced and a piece of land which was previously practically derelict has been made available for recreation.

The clothing of the children has been improved in accordance with modern ideas. An annual seaside outing for the children has been instituted. The scout movement has been consistently encouraged.

Chronic bed cases have been accorded open-air treatment to a much greater extent than before, a number of special cots having been made at Baguley Sanatorium for the purpose.

In 1937 there was a rather severe epidemic of influenza among the children, but, fortunately, the epidemic yielded to the active treatment of the medical officer, and terminated without any serious results.

The following are particulars of the admissions, discharges, etc., during the year 1937 :—

Admissions	.. .. .	37
Discharges	.. .. .	43
Deaths	.. .. .	—
Number of children in the Home at 31st		
December, 1937	.. .. .	115

THE MANCHESTER JOINT HOSPITALS ADVISORY BOARD.

[The constitution and functions of the Joint Board were reproduced in full in the Annual Report for 1936.]

ANNUAL REPORT, 1936-37.

We have pleasure in submitting this, the Second Annual Report, for the year 1936-37.

Since the issue of the previous Annual Report, the passing of one of the members of the Joint Board, Mr. C. E. R. Abbott, must be recorded. Mr. Abbott's services as the Chairman of the Duchess of York Hospital for Babies and representative of the Voluntary Hospitals Council were very valuable by reason of his intimate knowledge of the work of voluntary hospitals.

During the year under review two new members have been appointed to the Joint Board, *i.e.*, Dr. R. G. MacGowan, representing the Manchester Division of the British Medical Association, and Mr. T. F. Heyworth, representing the Voluntary Hospitals Council, in place of the late Mr. C. E. R. Abbott.

Annual Meeting, 1936.

The First Annual Meeting of the Joint Board was held on the 23rd November, 1936, when the Annual Report of the Joint Board for the year 1935-36 was presented. The Lord Mayor (Alderman J. Toole, J.P.) presided and expressed great personal pleasure in so doing.

Sir Christopher Needham, as Chairman of the Joint Board, in moving the adoption of the Report, spoke of the organisation and the development of the Joint Board. He referred in terms of warm appreciation to the valuable work of Mr. Walter Cobbett in the formation of the Board, and in his capacity as Chairman of the Council of the University he expressed the satisfaction of the University with their representation upon the Joint Board, having regard to the fact that Section 13 of the Local Government Act, 1929, did not contemplate any such feature in the consultations foreshadowed by that Section.

Sir Christopher also stressed the complete absence of partisanship which had marked the whole of the deliberations of the Joint Board and its Committees. Although so many interests were involved, the obvious desire of all concerned was to benefit the sick.

Councillor Edwards in seconding the adoption of the Report emphasised the goodwill which had been engendered between the municipal and voluntary hospitals, and the liaison and co-ordination which had developed and was still developing rapidly not only between the units representing the voluntary hospitals, but between the municipal and voluntary hospitals.

Other speakers in support were Mr. A. E. Gaddum (on behalf of the Voluntary Hospitals Council), Professor E. D. Telford (on behalf of the Vice-Chancellor of the University), Councillor S. Meadowcroft (Chairman of the Manchester Public Health Committee), and Dr. R. Veitch Clark (Medical Officer of Health for Manchester).

Dr. R. Veitch Clark, Medical Officer of Health, said that a hospital service to be really efficient must be a unit service, the hospitals themselves having individual freedom to achieve advancement in medicine and surgery. One thing he hoped for was correlation in the work of the staffs of hospitals and the development of special units for rheumatism, genito-urinary and orthopædics, with those most experienced in this type of work working together.

The Meeting and the Report were given full publicity in the local Press and the Medical Periodicals commented most favourably upon the progress being made in Manchester, paying tribute to the wisdom which prompted the setting up of the Advisory Panel, to assist the Public Health Committee in the appointment of Consultant Staff.

As an instance, the following is quoted from "The Lancet," referring to the Minister of Health's hope for the fullest consultation between the local authorities and the medical profession :—

"The hope thus expressed has been realised more fully in Manchester than anywhere else—partly, no doubt, because the poor-law hospitals there were always wisely and humanely administered. In Manchester negotiation between representative committees has been abandoned in favour of something much more effective—namely, a Joint Hospitals Advisory Board—and its first annual report shows the sort of action that may be expected when collaboration between hospitals turns from theory into fact."

Numerous requests for copies of the Annual Report coming from all parts of the United Kingdom have served to illustrate the interest which has been engendered by the establishment of the Joint Board.

Immediately prior to this meeting an ordinary meeting of the Joint Board had been held, when nominations from the constituent bodies of representatives on the Joint Board for the ensuing twelve months were received, and at its meeting also the nomination of the representative of the Manchester Branch of the British Medical Association was reported, and Dr. MacGowan was appointed to the Committee considering the question of the reduction of waiting lists.

Reduction of Waiting Lists at Hospitals.

This question being one in which it is essential that the Committee should be supplied with accurate and reliable figures before any constructive recommendations could be framed, most careful thought was given to the type of questionnaire forwarded to the various hospitals for completion, with reference to their present waiting lists.

The Questionnaire requested information under eighteen headings and was so phrased as to ensure that a complete picture of the problem would result.

Arising out of the consideration of the Questionnaire is the importance for future statistics of a system common to all the hospitals of nomenclature in the classification of diseases.

A major problem which at the outset appeared difficult was that of the patient whose name was on the waiting list of two or more hospitals, but with the valuable co-operation of the Northern Association of Hospital Secretaries, this difficulty has been met by the checking of hospital registers one against another. For this purpose the General Superintendents and Secretaries of the Hospitals concerned willingly gave their services and extended this checking to include possible overlapping with the School Medical Service lists for ear, nose, and throat work performed at Booth Hall Hospital and similar work at other hospitals. As a result it was ascertained that there were only eight cases of patients on the waiting list of two or more hospitals.

Arrangements were made for the checking of the gynæcological waiting lists between the Manchester Royal Infirmary and St. Mary's Hospitals ; the aural waiting lists between the Royal Infirmary and the Ear Hospital ; and the general and special surgical waiting lists between the Royal Infirmary and the Ancoats, Jewish, and Northern Hospitals.

The information thus obtained was summarised, providing for the first time a comprehensive view of this problem of the Manchester Hospitals.

At the same time the attention of the Executive Committee was drawn to a communication from the Manchester Local Medical and Panel Committee as to the economic position of insured persons on the waiting lists of the voluntary hospitals and the action of Approved Societies in connection therewith. In this communication it was pointed out that the Approved Societies have been very tolerant in the past, but now that they are aware of an alternative method of accelerating treatment by means of the rapid admission to the municipal hospitals, the economic position of the patient caused by the reduction of earnings is being stressed together with the resulting interference by reason of the patient being treated at a hospital other than that of the patient's own choice. The Local Medical and Panel Committee desired to draw the attention of the Joint Board to what may become an acute economic issue in the event of the support of the various Hospital Benevolent and Convalescent Homes Funds being withdrawn from any particular hospital.

After consideration of the summary of replies to the Questionnaire, the Executive Committee considered it desirable that this matter should be referred to a Special Committee, consisting of the following medical members of the Joint Board, for consideration and report:—

Councillors Chadwick and Tylecote ;

The Medical Officer of Health ;

Mr. H. Platt, F.R.C.S. ;

Mr. J. Morley, F.R.C.S. ;

Dr. R. G. MacGowan ;

Professors Ramsbottom, Telford, and Fletcher Shaw ; and

Professor Dougal as a Co-opted Member.

For the consideration of such Committee additional information has been obtained relative to a further analysis of the classification of cases awaiting admission to the voluntary hospitals, and information regarding the municipal hospitals is now being obtained relative to the average length of stay of in-patients, number of operations per month, and the approximate number of vacant beds and period when they would be available for use if it was considered that any interchange of patients could be arranged.

Unification of Orthopædic Services.

The Inter-Departmental Committee appointed by the Home Office, etc., have been considering this matter from the national standpoint and had addressed to the Hospitals in the City a Questionnaire respecting the work of the present fracture clinics. A copy of the replies thereto

was obtained for the information of the Committee and this, together with a memorandum showing the replies received by the Central Bureau of Hospital Information to a Questionnaire respecting fracture services provided in certain voluntary hospitals throughout the country and an account of the working of the fracture service of the Manchester Royal Infirmary, has now received careful consideration.

From it has emerged the fact that there were approximately 5,400 new fracture cases dealt with in Manchester in 1935.

From an analysis prepared by Mr. H. Platt, F.R.C.S., for the information of the members of the Committee, he estimates that there will be 5,000 new fracture cases annually to be dealt with, and from the work of the fracture clinic at the Manchester Royal Infirmary it appears that fracture cases can be classified in the following three main groups:—

- (a) Street (where a moving vehicle is concerned) . . 18 per cent.,
- (b) Industrial 12 per cent.,
- (c) Domestic (including sport, etc.) 70 per cent.,

of which approximately 30 per cent. are cases of children.

Information was submitted respecting the present fracture clinics at the various hospitals and consideration has also been given to the number of main fracture units desirable for the unification of the orthopædic services, due regard being paid not only to the work which has been undertaken by the various hospitals up to the present time, but also to the future geographical distribution of this service in the different areas of the City, and the responsibilities attaching to such units in regard to undergraduate teaching, post-graduate training, investigation, and research.

Another factor of considerable importance has been the recent opening of the Casualty Departments at the municipal hospitals. The number of cases treated at the municipal hospitals is increasing, and the question of bed accommodation available must play an important part in the final consideration of this matter.

It is therefore apparent that any decision can only be made after due weight has been attached to many considerations. Accordingly the question has, in the first place, been referred to the medical members of the Committee for consideration and report, in order that certain essential bases may be agreed before a scheme for the unification of orthopædic service is framed.

Reduction of Working Hours for Nurses.

At the meeting in February last the Joint Board was requested by the Public Health Committee to give consideration to the action to be taken with regard to the suggested reduction in the working hours for nurses.

Proposals for such a reduction have been receiving the consideration of the Public Health Committee for a considerable time, and the Medical Officer of Health recently submitted to the Public Health Committee a report indicating the financial effect of the introduction of a reduced working week for nurses.

Whilst the Public Health Committee unanimously resolved that a considerable reduction in the working hours of nurses is essential, it regretted its inability to take any action in the matter at the present time owing to the cost involved and the present financial stringency.

The Public Health Committee, in referring this matter to the Joint Board, were actuated by the desire to avoid any competition which might be engendered by any action taken by an individual unit, and considered it desirable that the Joint Board should consider this matter with a view to making a recommendation as to the standard of working hours to be adopted by the constituent bodies of the Joint Board.

It may be within the knowledge of all interested that certain hospitals have recently announced their intention of introducing a 48-hour working week for nurses, but these proposals have not been discussed by the Joint Board.

Apart from the financial considerations affecting the various hospitals with regard to the provision of additional staff and accommodation therefor (over the financing of which the Joint Board has no control) there are many difficulties in the consideration of this matter as an individual item, as it would appear that this question is inevitably bound up with the larger problem of recruitment.

The Joint Board had before them the recommendations which had been submitted from time to time from the Lancet Commission on Nursing, the Association of Hospital Matrons, the College of Nursing, and the Joint Committee of the Association of Municipal Corporations and the County Councils Association.

As it was understood that the Association of Hospital Matrons had for some time been discussing the desirable standards of working hours, etc., the observations of the local group on the outcome of their deliberations were requested.

The Association of Hospital Matrons considered that a reduction in the working hours of nurses should be effected as soon as possible. They agree that a 48-hour working week is desirable, but they deplore the attempt to control nurses' hours of duty by legislation as it is considered that such legislation would cut at the root of the spirit of service in the profession and inevitably react against the welfare of the sick.

The question has now been referred to the Executive Committee for consideration and report.

Since the preparation of this portion of the report an intimation has been received that the Minister of Health and the President of the Board of Education have decided to appoint, at an early date, a Committee, including representatives of the hospitals, the local authorities, and the medical, nursing, and teaching professions, to make a comprehensive inquiry into questions regarding the recruitment, training, and employment of nurses. The Earl of Athlone has consented to be Chairman of the Committee.

In conclusion, whilst no decision on matters of major policy has been arrived at during the year under review, owing to the complexity of the problems under consideration, it will be appreciated that the discussions at present proceeding are essential and of the greatest value.

C. T. NEEDHAM,
Chairman.

R. G. EDWARDS,
Vice-Chairman.

WORK DONE BY THE MIDWIVES' SECTION.

This section deals with :—

- A. INSPECTION OF MIDWIVES under the Midwives Acts, 1902–1936.
- B. DOMICILIARY NURSING VISITS TO MOTHERS AND BABIES, in connection with schemes for maternity and child welfare under the Maternity and Child Welfare Act, 1918.
- C. INVESTIGATION OF CASES OF—
 - (i.) Maternal death.
 - (ii.) Puerperal fever and pyrexia.
 - (iii.) Emergency neo-natal deaths in midwives' practices.
 - (iv.) Pemphigus neonatorum.

STAFF—

Inspector of Midwives.

Assistant Inspector of Midwives.

4 Maternity Nurses.

3 Ophthalmic Nurses. (see special report).

53 Municipal Midwives (see report below).

A. *Inspection of Midwives*

The Midwives Act, 1936, came into force on July 31st, 1937. Section 1 (1) of the Act is as follows :—

“ It shall be the duty of every local supervising authority within the meaning of the principal Act (in this Act referred to as an “ authority ”) to secure, whether by arrangements with welfare councils or voluntary organisations, for the employment by those councils or organisations of certified midwives as whole-time servants or by itself employing such midwives, that the number of certified midwives so employed who are available in its area for attendance on women in their own homes as midwives, or as maternity nurses during childbirth and from time to time thereafter during a period not less than the lying-in period, is adequate for the needs of the area.”

The voluntary organisations undertaking domiciliary midwifery in Manchester are St. Mary's Hospital and the Manchester and Salford District Nursing Institution. In 1936 there were 5,570 domiciliary births, and of these 667 were attended by St. Mary's district service and 356 by the Manchester and Salford District Nursing Institution, leaving 4,547 which were attended by independent midwives acting as midwives or maternity nurses.

The City Council has entered into agreements with the Board of St. Mary's Hospital to continue to carry on its district practice, and with the Manchester and Salford District Nursing Institution, by which the institution will provide the equivalent of four full-time midwives distributed amongst its various homes.

The number of domiciliary births for which the Council was required to provide midwives was 4,547. It was considered that 80 births a year were as many as each midwife could attend, and that, therefore, a full service would require 58 midwives. As it was realised that some midwives would wish, at any rate for a time, to continue in independent practice, 50 were appointed and began work in August, 1937. In September three more were appointed, and at the end of 1937 these midwives had attended—

1,040 confinements as midwives.

146 confinements as maternity nurses.

20 miscarriages as nurses.

The fees fixed by the City Council for the services of municipal midwives were :—

For attendance at a first confinement—

40s. as a midwife.

35s. as a maternity nurse.

For attendance at any other confinement—

35s. as a midwife.

30s. as a maternity nurse.

For attendance at a miscarriage—20s.

For the working of the service the city is divided into ten areas and the midwives work in groups of from 4 to 9, with some sub-groups. This allows mothers in each district a reasonable freedom of choice of midwife, and allows midwives to relieve each other for off-duty time, holidays, and sickness. Each midwife has 24 hours off duty in every week, and one week-end of 48 hours each month. A telephone has been provided for each midwife.

The Midwives Act, 1936, provided (Section 5) that—

(a) if a midwife surrendered her certificate voluntarily within three years after July, 1936, she would be entitled to compensation equal to three times her average net income ;

(b) if an authority considered that a midwife was incapable by reason of age or infirmity of mind or body of efficiently performing her duties, it might direct her to surrender her certificate, with payment of compensation equal to five times her annual net income.

By the end of 1937, 18 midwives had voluntarily surrendered their certificates and £3,290 16s. 3d. was paid in compensation.

In accordance with the conditions of service of the Manchester Corporation Superannuation Act midwives on attaining the age of 65 years were held to be "incapable by reason of age" to continue in practice. Eleven midwives were therefore directed to surrender their certificates and two were retired on account of infirmity. The amount of compensation paid was £5,054 13s. 9d.

At the end of 1937 there were 39 midwives remaining in independent practice.

From July 31st, 1937, to the end of the year, 2,131 applications for municipal midwives were received. During that period, 1,186 patients were delivered, 67 were transferred to hospital on account of unsatisfactory conditions before or during labour. In 20, the pregnancies ended before the 28th week.

Thirty-seven applications were withdrawn on account of removal out of district and other domestic reasons.

Of the cases attended, 228 applied for assistance, 96 were assessed to pay part fee, and for 132 no charge was made.

Visits made to midwives in their own homes	563
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* Midwives interviewed at the office	195
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The municipal midwives report at the Public Health Office once a fortnight. They are seen by Supervisors of Midwives and all matters concerning their work are discussed and advised upon.

* This figure does not include the routine fortnightly visits made to the office by the municipal midwives.

Total registered births for the City (adjusted figure)—

Live births	10,754
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Still births	468
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—————	11,222
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Total notified births (live and still unadjusted figure) ..	12,810
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Occurrence of Notified Births.

(1) Births at Home—

(i.) Taken by midwives, including cases in which midwife acted as maternity nurse (figures based on yearly return of cases made by midwives to L.S.A.) 4,809

(ii.) Taken by doctors (no midwife present)* 94

(iii.) Taken by St. Mary's Hospital District

Staff in Manchester area 667

5,570

(2) Births in Institutions—

(i.) Hospitals 6,385

(ii.) Maternity homes registered under Nurs-

ing Homes Registration Act, 1927.. .. 1,062

7,447

13,017

* No midwife present means no midwife who has given notice of intention to practice. The attendant ranges from a fully-trained resident midwife to a relation of the mother or a handy woman.

Number of Midwives in Practice.

221 midwives gave notice of intention to practice during 1937. Of the independent practising midwives, during the year 31 retired with compensation (13 were compulsorily retired and 18 retired voluntarily under section 5 of the Midwives Act, 1936). Of the remainder 2 removed from the area, 1 gave up work, keeping her certificate, 53 were appointed to the municipal service. 14 of those who lived outside the city were appointed to the municipal service in their own area and ceased to practice in Manchester. 53 remained in independent practice, 14 living outside the city. Of the remaining 67, 34 were employed in nursing homes with no registered medical practitioner, and 33 were attached to district nursing associations.

An analysis of all the cases taken by midwives is given in the following table :—

TABLE I.
Analysis of Cases taken by Midwives who notified intention to practice.

Midwives notifying intention to practice	Number of Midwives	Midwife only at the Case		Midwife with Doctor called in		Midwife as Maternity Nurse	Total Number of Cases	Per cent. of Births in City
		Primi-paræ	Multi-paræ	Primi-paræ	Multi-paræ			
1. BIRTHS AT HOME.								
(a) 1. Municipal midwives, i.e., since July 31st.. .. .	53	141	704	88	107	146	1,186	9·25
2. Cases taken by these midwives before July 31st .. .. .	..	161	885	98	172	198	1,514	11·81
(b) Midwives retired or removed during the year	32	88	320	44	88	77	617	4·81
(c) Independent midwives living in Manchester area	39	150	494	71	66	151	932	7·27
(d) Independent midwives living outside Manchester area.. .. .	14	7	45	19	20	43	134	1·04
(e) Independent midwives outside Manchester area now employed by other municipalities	14	9	16	3	..	6	34	·26
(f) Independent midwives retired or removed outside Manchester area	2	1	15	6	12	2	36	·28
Midwives employed by District Nursing Institution :—								
Manchester	29	33	175	21	30	97	356	2·77
Salford	3							
County Nursing Association	1							
	187	590	2,654	350	495	720	4,809	37·54
2. BIRTHS IN INSTITUTIONS.								
Midwives employed in registered Nursing Homes and having no resident medical practitioner ..	34	263	177	45	14	287	786	6·13
	221	853	2,831	395	509	1,007	5,595	43·67

Total number of cases taken by midwives shows a decrease of 302. There was a decrease of 284 of all notified births.

The following table shows the amount of work done by the 39 midwives residing in Manchester remaining in independent practice :—

TABLE II.			
Practices with over 100 cases per annum	..	..	1
„ „ under 100 and over 50	..	..	6
„ „ under 50 and over 20	..	..	8
„ „ under 20	..	..	19
„ „ no cases taken	..	..	5

Per cent.
Notified
Births

Distribution of all Domiciliary Cases (based on Notified Births).

5,570 births took place in domiciliary practice .. = 43·4

Distributed as follows :—

See Table I.—

Midwives only at the birth	3,244	=	25·32
Registered medical practitioner summoned by midwife under C.M.B. rules and present at birth	845	=	6·60
Registered medical practitioner with mid- wife as maternity nurse	718	=	5·62
Registered medical practitioner (no mid- wife present)	94	=	0·73
St. Mary's Hospital District Service ..	667	=	5·99

The proportion of cases taken by midwives and midwives acting as maternity nurses, calculated on *registered live* births, is as follows :—

	Per cent.
1932	54·94
1933	52·34
1934	52·61
1935	53·69
1936	44·83
1937	44·71

Supervision and Instruction of Midwives.

Midwives were suspended from work on 99 occasions on account of contact with infection or being themselves liable to be a source of infection.

As there is a staff of trained nurses available to take over their cases, midwives are encouraged to report cases with raised temperature before they become notifiable under the Puerperal Pyrexia Regulations.

Suspensions.

1932	88 = 1·35 per 100 cases taken.
1933	92 = 1·57 „ „
1934	79 = 1·31 „ „
1935	120 = 1·98 „ „
1936	95 = 1·86 „ „
1937	99 = 2·05 „ „

Rules of the Central Midwives Board.

Rule E 17 (a) has been amended. The midwife is now required to attend the patient for 14 days after the confinement. This amendment came into force on January 1st, 1937.

No serious breach of the Rules of the Central Midwives Board has occurred during the year.

Handywomen.

In 1 case of puerperal fever there was no midwife in attendance. The mother of the patient assisted the doctor. She was visited and advised *re* disinfection.

Lectures.

The series of 6 post-graduate lectures which have been given to the midwives each year by specialists have been discontinued owing to the coming into force of the Midwives Act, 1936. Under this Act special arrangements will be made by the Central Midwives Board for post-graduate courses for all midwives. It is hoped to begin these courses in 1938.

Practical Training of Midwives.

Seven midwives are approved as "teacher midwives" by the Board to take pupil midwives for district experience.

Seventy-six pupil midwives received district training during 1937.

Payment to Midwives by the Local Authority.

1. Under the Midwives Act, 1926, section 2 (1), for loss of work during suspension—11 claims.. ..	£	s.	d.
	14	8	0
2. For non-booked cases taken as emergencies (including abortion)—14 claims.. ..	10	5	0
3. By resolution of the City Council, August 3rd, 1932, 10s. may be paid to a midwife who loses her fee because she has sent a booked case to an Infant Welfare Ante-Natal Clinic and the case has subsequently been transferred to hospital prior to or during delivery. 34 claims	17	5	0
4. By resolution of the City Council, July 2nd, 1935, payments may be made to midwives in necessitous cases—35s. for a primipara, and 30s. for a multipara. 162 claims. (This was rescinded in July, 1937, when the Midwives Act, 1936, came into force)	242	12	6
Total	£284	10	6

Records of Calling-in Medical Aid.

Records of calling in medical aid in accordance with the Rules of the Central Midwives Board were sent in by the independently practising midwives, by midwives from District Nursing Associations, and by midwives in Registered Maternity Homes having no resident medical officer. The number of records sent and the number of applications for payment of their fee by registered medical practitioners is shown below :—

TABLE III.

	Number of Midwives' Own Cases	Number of Records Sent	Number of Records Sent per 100 Cases	Number of Applications for Payment	Number of Applications made per 100 Records
1932	5,474	2,538	46·3	1,500	59·1
1933	4,901	2,413	49·2	1,455	60·2
1934	5,033	2,470	49·0	1,477	59·9
1935	4,975	2,552	51·2	1,642	64·3
1936	4,836	2,637	54·5	1,617	61·3
1937	4,588	2,703	58·6	1,663	61·5

Number of cases referred by midwives to ante-natal clinics :—

1930	405	= 6·59 per cent. of their cases.
1931	338	= 5·78 „ „
1932	211	= 3·85 „ „
1933	208	= 4·24 „ „
1934	294	= 5·84 „ „
1935	434	= 8·72 „ „
1936	667	= 13·79 „ „
1937	863	= 18·77 „ „

This does not give a true picture of the number of women who attend ante-natal clinics and are later delivered by midwives, as in many cases the mother goes to the clinic before she books her midwife, and the written record of having referred a patient to the clinic is not in that case always sent to the Local Supervising Authority.

The next table shows how many calls for assistance were made, and by whom, during the ante-natal, intra-natal, and post-natal periods :—

TABLE IV.

	Records sent to Doctors		Records sent to Ante-natal Clinics
	Assistance in labour and puerperium	Assistance during pregnancy	
Midwives in private practice ..	1,872	502	854
Midwives of the District Nursing Association	103	8	9
Midwives in Maternity Homes ..	208	10	..

16·4 per cent. of all records of sending for medical aid by midwives for emergencies during labour and the puerperium were for delayed labour, and 29·9 per cent. for ruptured perineum. This is respectively 7·7 per cent. and 14·2 per cent. of all their cases, and compares with 8·9 per cent. and 12·2 per cent. for 1936.

48·8 per cent. of all the records were sent for assistance during labour. 32·9 per cent. were for unsatisfactory conditions occurring during the puerperium. Of these 24·1 per cent. were for the infant.

Payment of Medical Fees.

Payment of fee of the registered medical practitioner called in by the midwife, in accordance with the Rules, is made by the Local Supervising Authority under the authority of the Midwives Act, 1918, section 14 (1). The Local Supervising Authority has power to recover the fee from the patient, or husband, if they have the means to pay.

Particulars of applications in 1937 for the payment of fees :—

	1936	1937
Number of families whose incomes were below the scale ..	502	489
" " " " above the scale ..	962	1,021
" " who paid doctor themselves	24	14
Conditions not fulfilled	22	20
No account sent (see Ophthalmia Neonatorum Regulations, 1926)	107	119
Number of fees paid by the Local Supervising Authority ..	1,571	1,643

Provision of the Services of Consultants for certain Puerperal Complications.

Second Opinion.—Under the Notification of Puerperal Fever and Puerperal Pyrexia Regulations, 1926, such a service has been provided by the city. A fee of £3 3s. for the consultation is payable by the Public Health Committee.

	1936	1937
	<hr/>	<hr/>
The number of such fees paid was	4	10

Obstetric Difficulty.—In connection with the Council's scheme for maternity and child welfare under the Maternity and Child Welfare Act, 1918, the provision of a consultant service was extended in 1930 to allow medical practitioners to call in a consultant in the event of obstetric difficulty arising during the ante-natal period, labour or the puerperium. The fee is fixed at £5 5s. inclusive.

	1936	1937
	<hr/>	<hr/>
The number of such fees paid was	22	18

Consultants must, in every case, be selected from a list of approved practitioners engaged solely in gynæcological and obstetric practice in the city.

Payments made under the above Acts for the period January 1st to December 31st, 1937, were as follows:—

Midwives Act, 1918.

	£	s.	d.
Paid to doctors	1,895	10	9
Recovered from the patients	643	14	5

Puerperal Fever Regulations, 1926.

Paid to consultants	25	4	0
Recovered from the patients	—		

Maternity and Child Welfare Act, 1918 (Difficult Labour).

Paid to consultants	113	8	0
Recovered from the patients	23	19	6
Total paid	2,034	2	9
Recovered	667	13	11

The average nett cost to the Council per case for medical assistance in cases booked by midwives is 8s. 10d.

B.—*Domiciliary Nursing Visits to Mothers and Babies.*

The mothers and babies who are nursed or helped by the 4 trained nurse-midwives on the staff of the Department are referred to them from the following sources :

- (a) Midwives.
 - (b) Registered medical practitioners, under the Puerperal Fever, Puerperal Pyrexia, and Pemphigus Neonatorum Regulations.
 - (c) Health visitors.
 - (d) Maternity and child welfare clinics.
- (a) *Midwives.*—Midwives cases may be—
- (i.) Normal puerperal cases with some septic condition.
 - (ii.) Normal puerperal cases when the patient is in contact with an infectious disease, such as measles, and isolation cannot be obtained.
 - (iii.) Abnormal puerperal cases, in which either mother or baby has some condition diagnosed as septic, or thought likely to be so.
 - (iv.) Cases in which there is some unsatisfactory condition of mother or baby at the end of the ten-day lying-in period which requires further nursing, *e.g.*, inflamed veins, premature baby.
- (b) *Cases from Doctors.*—An offer of skilled nursing is made to every practitioner who notifies a case under the Puerperal Fever, Pyrexia, or Pemphigus Neonatorum Regulations. The nurse then works under the direction of the patient's own doctor.
- (c) *Health Visitors' Cases.*—The nurse visits because the health visitor reports some abnormal condition of mother or baby, such as cracked nipples, prematurity, or insufficient breast milk.
- (d) *Maternity and Child Welfare Clinics.*—The doctor at the clinic asks to have a baby treated for some condition, such as an unhealed umbilicus. A large number of cases for re-establishment of breast feeding come from the clinics.

The visits paid by the nurses under the above headings in 1937 were as follows :—

	Number of Visits.
Puerperal Fever, Puerperal Pyrexia, Raised Temperature..	768
Mammary Abscess and Mastitis	646
Phlebitis	66
Cases of infection in the house	191
Mother still unsatisfactory at end of lying-in period.. ..	55
Pemphigus Neonatorum and other skin conditions.. ..	997
Septic and unsatisfactory umbilicus	789
Spina Bifida	2
Prematurity of Infant	1,073
Promotion and re-establishment of breast-feeding	187
Unsatisfactory infants	33
	<hr/>
	4,807

Artificial Feeding.—On October 1st, 1935, the revised rules of the Central Midwives Board in connection with artificial feeding came into force, Rule E 27 (b).

This rule now requires that all cases in institutions where it is proposed to substitute artificial feeding for breast feeding must be notified to the local authority. Prior to this revision, the rule only applied to practising midwives.

During the year, 284 notifications of recourse to artificial feeding were received, 68 from midwives and 216 from institutions.

In 163 of the total cases it was stated that it was supplementary and not a complete change-over. Of the remainder, the causes given were :—

Poor health of the mother in	56 cases.
On the advice of the doctor ..	14 ..
Mastitis	5 ..
Social reasons	14 ..
Baby not making progress ..	9 ..
Baby being adopted ..	7 ..
Other causes	16 ..

Re-establishment of Breast Feeding.—All domiciliary cases in which artificial feeding has been resorted to, are visited by the health visitor ; if it is thought there is any chance of promoting, or re-establishing breast feeding, they are referred to the special maternity nurse.

Of the 13 cases taken by the nurses, 4 were successful and 1 partly successful.

Of the 8 which were unsuccessful, the cause was attributed to :—

- Lack of co-operation of mother in 4 cases.
- Poor health of the mother 2 ..
- Badly cracked or depressed nipples 2 ..
- Lack of secretion 2 ..

Weakly and Premature Infants.—1,073 visits were paid by the special nurses to weakly and premature babies.

73 babies were attended, including 4 sets of twins. The special nurses attended till the babies reached 7lbs. in weight, when they were passed on to the health visitors, who continued to pay regular visits. The results when last seen by the health visitors were :—

Doing well	46—28	were completely	and	18	partly breastfed.
Fairly well	9— 5	.. ..	..	7	.. ..
Removed	5— 3	.. ..	..	2	.. ..
Died	13— 6	.. ..	..	7	.. ..

The weights of 9 babies who are doing well were at birth under 4lbs.— 5 weighed between 3 and 4lbs. ; 3 between 2½ and 3lbs., and 1 weighed 2lbs. 2ozs.

- c. *The Investigation of Cases of—*
- (i.) Maternal death.
 - (ii.) Puerperal Fever and Pyrexia.
 - (iii.) Pemphigus Neonatorum.

Maternal Deaths.

47 deaths from child-birth occurred amongst Manchester mothers and were investigated in accordance with the request of the Ministry of Health.

It is satisfactory to record a decrease in the total number of deaths this year from both puerperal sepsis and other causes, with a consequent fall in the maternal death-rate.

The decrease is most marked in the institution cases in the deaths from causes other than puerperal sepsis.

In 74 per cent. of all the cases the family circumstances were reported to be comfortable.

The following table gives the classification of all the maternal deaths the last column gives the 1936 rate for comparison.

TABLE V.
CAUSES OF DEATH IN CHILD-BIRTH DURING 1937.

Cause	Normal Full-term Labour	Abnormal Full-term Labour	Abortion	Total	Rate per 1,000 Registered Live and Still Births	
					1937	1936
*Puerperal Sepsis	5	2	8	15	1·34	1·69
Other causes	25 (5 undelivered)		7	32	2·85	3·29
				47	4·19	4·98

* 2 of these cases (both cases of abortion) had been referred to the Coroner and were not notified as puerperal fever, and 1 died before notification.

TABLE VI.
ATTENDANT AT CONFINEMENT WHEN MOTHER SUBSEQUENTLY DIED.

	MIDWIVES' CASES		DOCTORS' CASES			Hospitals and Nursing Homes	Hospital extern. District	No attendant at Confinement	EARLY PREGNANCY	
	Midwife only	Doctor present, called in by Midwife according to C.M.B. Rules	Doctor with Midwife as Maternity Nurse	Doctor only. No skilled nursing	Death Rate per 1,000 cases taken				Abortions	Undelivered
Puerperal Sepsis ..	2	2	1	..	..	1	1	..	8	..
Other Causes ..	7 (3 admitted to Hospital for delivery) 2 died undelivered		9 2 died undelivered 1 admitted to Hospital	..	..	9 1 died undelivered	..	..	2	5
Total ..	11		10	..	..	10	1	..	10	5

For number of cases taken, see page 271 of the Report.

The following table gives the figures for the last 5 years :—

Year		No. of Deaths		Percentage of Maternal Deaths
1933	....	21	....	29·5
1934	....	18	....	30·5
1935	....	11	....	25·5
1936	....	17	....	28·8
1937	....	15	....	31·9

In addition to the deaths in the foregoing tables, there were 20 deaths where child-birth was not the primary cause of death, and 35 deaths, including 7 from puerperal fever, where the home address was outside the City.

Puerperal Fever and Puerperal Pyrexia.

Under the Public Health Act, 1936, the term puerperal fever has been omitted from the definition of notifiable diseases.

The notification of puerperal pyrexia now covers all conditions previously notified as puerperal fever and puerperal pyrexia. This clause of the Act came into operation on October 1st, 1937.

Every case of puerperal fever and of puerperal pyrexia notified under the appropriate regulations is investigated at the patient's home address and by interviewing the attendants at the labour if thought desirable.

71 cases of puerperal fever and 123 cases of puerperal pyrexia were notified.

The diagnosis in some of these cases was afterwards modified. The changes in diagnosis from puerperal fever to other causes were :—

Changes in diagnosis from puerperal fever were :—

Pyrexia	1
Incomplete abortion	5
Inevitable abortion	1
Threatened abortion	2
Pleurisy	1
Leucorrhœa (normal pregnancy)	1
Normal puerperium	1
Pelvic abscess	1

Changes in diagnosis from puerperal pyrexia :—

Puerperal fever	23
Incomplete abortion	3
Inevitable abortion	1
Threatened abortion	1
Hydatidiform mole	1
Lobar pneumonia	1
Influenza	1
Delivered outside	1
	<hr/>
	32

leaving a total of 81 puerperal fever, and 92 puerperal pyrexia. Table VII. shows the distribution of the cases.

TABLE VII.
ANALYSIS OF CASES OF PUERPERAL FEVER AND PUERPERAL PYREXIA.

	Number of Cases	Abortion	Deaths from Abortion	Full-term and Premature Labour	Deaths at Full Term & Premature Labour
Puerperal Fever		At 2-3 months .. 16	1	Normal labour .. 40	4
		„ 4 months .. 4	1	Abnormal labour . 12	2
		„ 5 „ .. 3	—		
		„ 6 „ .. 1	1		
		No information .. 5	—		
	81	<hr/> 29	<hr/> 3	<hr/> 52	<hr/> 6

The number includes 1 abortion, and 4 full-term labours, delivered in Manchester Hospitals, but brought in from outside.

Puerperal Pyrexia		At 3 months .. 8	1	Normal labour .. 55	8
		„ 4 „ .. 2	1	Abnormal labour .. 24	6
		„ 5 „ .. 2	—		
		„ 6 „ .. 1	—		
		No information .. —	—		
	92	<hr/> 13	<hr/> 2*	<hr/> 79	<hr/> 14

The number includes 11 full-term cases brought in from outside districts and delivered in Manchester Hospitals. 5 died from Sepsis, * died from Sepsis.

The attendant at the confinement and the subsequent nursing care of the cases is given in Tables VIII. and IX.

TABLE VIII.—ANALYSIS OF CASES OF PUERPERAL FEVER AND PUERPERAL PYREXIA.

	MIDWIFE						DOCTOR, Midwife acting as Maternity Nurse			DOCTOR, No Skilled Nursing			INSTITUTION			HOSPITAL, External District		
	Midwife alone			Doctor present, called in according to C.M.B. Rules			Number of Attacks	Attack Rate per 1,000 Cases taken	Number of Deaths	Number of Attacks	Attack Rate per 1,000 Cases taken	Number of Deaths	Number of Attacks	Attack Rate per 1,000 Cases taken	Number of Deaths	Number of Attacks	Attack Rate per 1,000 Cases taken	Number of Deaths
	Number of Attacks	Attack Rate per 1,000 Cases taken	Number of Deaths	Number of Attacks	Attack Rate per 1,000 Cases taken	Number of Deaths												
PUERPERAL FEVER, 81 Cases	18	2.66	..	6 (1 de- livered in Hosp'l)	15.17	3	8 (1 de- livered in Hosp'l)	3.00	1	2	47.00	1	15 (4 from outside areas)	2.01	1	3	4.49	..
Labour and pre- mature labour 52																		
Abortions 29	..	..	..	..	..	..	..	..	..	23 (14 sent direct to Monsall, 9 via other Hosp'ls)	..	2	2	..	..	..	..	..
	The attack rate in all cases booked by Mid wives was 4.99 per 1,000 cases taken																	
PUERPERAL PYREXIA, 92 Cases																		
Labour and pre- mature labour 79	14	1.00	..	5	5.42	1	5	5.00	..	..	..	..	50 (11 from outside area)	6.71	12* (5 from outside area)	..	..	..
Abortions 13	..	..	..	..	..	..	..	..	..	12 (6 sent direct to Monsall, 6 via other Hosp'ls)	..	1	5	..	..	..	..	..
	The attack rate in all cases booked by Mid wives was 4.79 per 1,000 cases taken																	

NOTES :—For number of cases taken, see page 272.

For the mortality rates, see table V.

Attack rates are not worked out for abortions, as the number of cases of abortions is not known.

* Childbirth not the primary cause.

TABLE IX.

	Nursed in Monsall	Died	Per- centage deaths	Nursed in other hospitals	Died	Per- centage deaths	Nursed at home	Died
Puerperal Fever ..	75	8	10·6	4	1	25·0	2	0
Puerperal Pyrexia.	41	5	12·1	40	11	27·5	11	0

The causes of death in two other cases notified as puerperal pyrexia, and not included in the maternal deaths, were :—

At Monsall Hospital—

1 (c) pericarditis and effusion ; (b) unresolved pneumonia.

At other institutions—

1 influenzal pneumonia (8 months pregnant).

After-care of Cases of Puerperal Fever and Puerperal Pyrexia.

106 women who have suffered from puerperal fever or pyrexia were visited. 81 were in good health ; 11 were under medical care ; 1 had been admitted to hospital for operative treatment for prolapse ; 5 were pregnant and were referred to the health visitor for “ follow-up ” visits ; 8 had removed from the district.

Still-birth and Neo-natal Death in Midwives' Practice.

The following table gives the total number of still-births notified in the City during the year :—

TABLE X.

Number Still-births Notified	Number in Practice of			Per cent. of Notified Births	
	Midwives, including cases in which a Doctor is called in under C.M.B. Rules	Doctors, including cases with Midwife acting as maternity nurse	Hospitals		
				1937	1936
622	102 = 2·49% of cases taken	58 = 7·14% of cases taken	*462 = 7·23% of cases taken	5·77	5·20

* 140 of these cases were mothers whose home address was outside the City.

Still-births in the Practices of Midwives.

During the year there was a slight decrease in the number of still-births in the practices of midwives—102, against 124 in 1936.

It is satisfactory to report a decrease in the number of still-births occurring in primiparæ, being 17·6 per cent. against 23·3 per cent. in 1936.

There is also a decrease in the number of still-births occurring in the full term fresh foetus after difficult and instrumental delivery. These were 7·8 per cent. of all cases against 11·2 per cent. in 1936.

It is satisfactory to report a reduction of still-births due to breech delivery—2·9 per cent. against 6·8 per cent. in 1936.

Poor health of the mother is given as a possible cause in 12·6 per cent. of these cases. Three of these mothers were primiparæ.

No medical examination of the mother or foetus was made in these cases.

Analysis of Possible Causes of Still-births.

	Foetus fresh			Foetus macerated		
	Full term	Pre-mature	No. of Primiparæ	Full term	Pre-mature	No. of Primiparæ
1. Illness of Mother—						
Influenza .. .. .	..	2	1	..	1	..
Probable specific disease .. ..	..	..	..	..	..	..
Albuminuria .. .. .	..	1	..	2	2	..
Probable toxæmia	1	..	..	..	..	..
Poor health	5	1	..	..	..	..
Falls	1	2	1	2	5	3
2. Ante-partum hæmorrhage	2	3	1	2	1	..
3. Hydramnios .. .. .	..	..	..	..	..	..
4. Accidents of labour—						
Instrumental delivery	2	..	1	..	..	..
Breech delivery	3	..	2	..	..	..
Long or difficult labour	6	..	3	..	..	..
Twin birth .. .. .	..	..	..	..	..	..
Abnormal cords	6	..	..	..	..	..
5. Congenital malformations	2	2	2	2	2	1
6. Shock	1	3	..	1	2	..
7. No sufficient reason	11	6	2	7	3	1
8. No information	2	..	..	..	2	..
9. Want of attention at birth	2	1	..	..	..	..
10. Post maturity	2	..	..	..	..	..
11. Multiparity	1	..	..	..	..	..
	47	21	13	16	18	5

Neo-natal Deaths in Midwives' Practice.

There were 69 deaths. Two of these occurred before a medical practitioner could be obtained, and in both these the doctor gave the certificate.

TABLE XI.
PEMPHIGUS NEONATORUM.

Pemphigoid skin rashes reported	Notified Cases	Not Notified	Total Deaths	Death per cent. of all reported cases
93	43 (5 died)	50	5	5.3

Incidence of fatal cases per registered live birth —

1931 0.57 per 1,000.

1932 0.25 „ „

1933 0.16 „ „

1934 0.17 „ „

1935 0.50 „ „

1936 0.08 „ „

1937 0.46 „ „

TABLE XII.
AGE AT ONSET.

	Under 2 weeks	2-3 weeks	3-4 weeks	Over 4 weeks
Notified cases ..	33	3	3	4
Not notified ..	29	11	10	..

TABLE XIII.

PEMPHIGOID RASHES IN DOMICILIARY AND HOSPITAL PRACTICE

	Midwives		Doctors		Hospitals and Registered Maternity Homes		Hospital Districts	
	Attack	Death	Attack	Death	Attack	Death	Attack	Death
Notified cases ..	13	2	6	..	15	1	9	1
Not notified ..	24	1	2	..	17	..	7	..

Of the 93 cases of pemphigus and pemphigoid rashes, 85 were nursed by the special nurses. 65 were of a mild type and the skin condition became normal in from 2 to 3 weeks. In 8 of these a slight condition of conjunctivitis was present.

Of the more serious cases, 14 recovered in 3 to 4 weeks, 3 in 5 weeks, 6 in 6 weeks and over, 5 cases died—certified cause pemphigus neonatorum.

During the year there was one small outbreak of pemphigus. One institution notified six cases on one day. None were serious, and all made a good recovery.

Summary of Investigations (other than nursing visits) made by the
Inspectors of Midwives and Special Maternity Nurses.

	Number of visits.
Maternal deaths	9)
Puerperal fever	126
Puerperal pyrexia	118
After-care in cases of puerperal fever and puerperal pyrexia	154
Still-births	2
Investigations into Midwives' compensation claims ..	8
Medical records and payments of medical fees	9

Total number of visits made by the staff :—

Inspectors of Midwives	.. .. .	563
Domiciliary Nursing	.. .. .	4,807
Investigations	.. .. .	516
		<hr/>
		5,886
		<hr/>

OPHTHALMIC SECTION.

The work of the ophthalmic section is carried out by 3 fully-trained nurses with special ophthalmic training, under the supervision of the Inspector of Midwives. They visit and treat, under medical supervision, all cases of eye disease from birth to school age, when those who still have eye defects are transferred to the School Medical Officer.

Cases are referred by—

1. Midwives, under the rules of the Central Midwives' Board.
2. Medical Practitioners and hospitals, under the Ophthalmia Neonatorum Notification Order.
3. Medical officers at the Child Welfare Clinics.
4. Health visitors.

During the year 1937, 714 new cases were visited. Of these, 399 were cases of eye disease in older children and 315 cases of ophthalmia neonatorum. The total number of visits paid was 7,058.

Ophthalmia Neonatorum.

116 cases were notified by private practitioners or by the Royal Eye Hospital as cases of ophthalmia neonatorum. A further 199 cases were reported by midwives who had advised medical aid for unsatisfactory eye conditions not subsequently notified as ophthalmia neonatorum.

TABLE A—1937 OPHTHALMIA NEONATORUM AND CONJUNCTIVITIS. HISTORY OF MOTHER.

	Age of Mother						Parity										Labour		Attendant not present at birth	No. of mothers having had previous cases of Ophth. Neon.	History of yellow discharge	Legitimacy		
																	Normal	Abnormal				Legit.	Illegit.	
	Under 20	20—25—	25—30—	35 and Over	Not ascertained	Total	1	2	3	4	5	6	7	8	9+	Not ascertained								
Notified Cases	3	25	36	28	20	4	116	37	30	20	8	6	7	—	4	4	106	10	6	5	8	112	4	
Not Notified (Midwives' cases)	5	41	58	43	35	17	199	46	53	34	23	11	4	4	1	6	17	193	6	4	6	—	196	3
Corneal Cases	—	1	2	—	1	—	4	2	1	1	—	—	—	—	—	—	4	—	—	—	2	4	—	

Total cases notified 116
Total cases not notified 199

315

315

TABLE B—1937 OPTHALMIA NEONATORUM.

	Interval in days between birth and onset										Attended by				Where treated				Total
											Midwife	Doctor	Midwife and Doctor	Institution	Home	Out-Patients at Royal Eye Hospital	In-Patients at Royal Eye Hospital	Other Institutions	
	1	2	3	4	5	6	7	8	9	10 +									
Notified Cases	7	5	6	8	6	16	6	12	11	39	68	3	1	44	79	16	17	4	116
Not notified (Midwives' cases)	13	4	10	10	11	17	15	14	22	83	191	1	7	—	197	1	1	—	199
Total cases notified										116									
Total cases not notified										199									

Table B shows the day of onset, the attendant at birth, and the place of treatment.

The greatest number of onsets were on the sixth and ninth days of life, and in over one-half of the cases the first signs of disease appeared after the first five days.

276 cases were treated by private practitioners and 35 received treatment at the Royal Eye Hospital.

Swabs were taken from the conjunctiva in all cases where possible, and sent to the Public Health Laboratory to be examined bacteriologically for the presence of gonococcus. 39 swabs were examined, and of these 4 gave a positive result. The mothers were advised to seek medical advice either from their own doctor or from a venereal disease clinic.

Where swabs have been taken, "follow-up" visits are paid at the end of six months. During the year 29 visits have been paid. Six who had discharge reported that it had cleared. Three have been under treatment, one for poor general health. Five have removed. The others were all in good health and stated they had no discharge.

Corneal Cases.

During the year there were four cases with involvement of the cornea, an increase of three on last year.

Case 1.—Onset 7th day in hospital. Swab taken: negative. Transferred to Royal Eye Hospital 9th day with a hazy cornea L. Discharged 16th day. Eyes then normal.

Case 2.—Onset 6th day in hospital. Swab taken: positive. Transferred to Royal Eye Hospital 7th day. Cornea not affected. Discharged three weeks later with rt. nebula cornea. The ophthalmic nurse is still visiting and reports the nebula is fading and will clear.

Case 3.—Onset 7th day in hospital. Admitted to Royal Eye Hospital 8th day. Discharged a month later with pin-point nebula L. The ophthalmic nurse is still visiting and reports the nebula is fading and will clear.

Case 4.—Onset 2nd day. Seen by private practitioner 3rd day and transferred to the Royal Eye Hospital. Discharged two months later with a small central nebula L. The ophthalmic nurse is still visiting and reports very faint nebula, which will clear.

TABLE C.—RESULTS OF THE CASES OF OPHTHALMIA NEONATORUM AND CONJUNCTIVITIS IN NEWLY-BORN INFANTS.

	Complete recovery	One Eye blind, other normal	One Eye blind, the other damaged	Both Eyes lost	Both Eyes damaged	One Eye damaged	Death before recovery	Removed before recovery
Ophthalmia	96	..	..	..	..	* 3 Nebulæ which will clear.	1	4
Neonatorum								
Conjunctivitis	169	..	..	..	..	..	..	9

Of the notified cases 64 cleared under one month and 25 cleared under two months.
15 cases of ophthalmia neonatorum and 21 cases of conjunctivitis were carried over to 1938.
* Included in the 15 cases of ophthalmia neonatorum carried over to 1938.

TABLE D.—TOTAL NUMBER OF CASES OF OPHTHALMIA AND CONJUNCTIVITIS
IN NEWLY-BORN INFANTS AND THE PERCENTAGE WITH CORNEAL
COMPLICATIONS, 1911-1937.

Year	No. of Cases	Percentage with Corneal complications
1911	525	7.23
1912	667	11.39
1913	573	12.04
1914	681	9.25
1915	642	7.79
1916	620	6.13
1917	539	6.86
1918	567	8.64
1919	698	4.73
1920	974	4.83
*1921	921	2.28
1922	604	2.30
†1923	569	1.70
1924	572	2.00
1925	533	1.30
1926	478	2.70
1927	444	2.70
1928	375	1.00
1929	334	1.70
1930	321	1.80
1931	255	1.10
1932	225	1.80
1933	250	1.60
1934	273	.36
1935	297	.33
1936	305	.65
1937	315	1.27

* 1 per cent. silver nitrate supplied to midwives from July, 1921.

† 7 per cent. Argyrol supplied to midwives to replace silver nitrate from March, 1923.

Eye Diseases in Older Children.

In addition to the cases of ophthalmia neonatorum and conjunctivitis in newly-born infants, the ophthalmic nurses visit and treat, under medical supervision, all cases of eye disease in children brought to their notice, until they have recovered, or, in cases of corneal and congenital defects, keep them under observation until they have reached school age, when they are referred to the School Medical Officer with a report on their condition. 14 children were so referred during the year.

During 1937, the staff has visited 399 new cases, and 101 cases carried over from 1936 ; a total of 500 cases.

	Old Cases Brought forward	New Cases	Carried over
Simple Conjunctivitis	21	252	29
Purulent Conjunctivitis	1	15	1
Lacrymal Obstruction	14	55	12
Dacryocystitis	1	3	1
Blepharitis	3	14	4
Corneal Ulcers	3	3	5
Nebulæ cornea	19	12	16
Coloboma	3	1	2
Cataract Congenital	14	1	6
„ „ (traumatic)	—	2	2
Glioma	1	—	1
Defective Vision	4	2	4
Microphthalmus (one eye)	1	—	1
Iritis	1	—	1
Rinitis	—	—	—
Staphyloma	1	—	—
Nystagmus	1	2	3
Corneal scar (traumatic)	—	—	—
Keratitis	—	—	—
Anophthalmos { congenital	4	2	2
{ following accident	—	2	3
Hordeolum	1	3	—
Phlyctenula	2	2	1
Albino	1	—	1
Prophosis	—	—	—
Leucoma	2	—	1
Blind through perforation { both eyes	1	2	1
{ one eye	1	—	1
Buphthalmos	1	—	1
	101	399	99

99 cases have been carried over into 1938.

There is a slight increase in the cases of blepharitis and corneal opacity.

The following table gives the figures for the last ten years :—

Year	Blepharitis	Corneal Opacity (found as Ulcer or Nebulæ)
1927	36	36
1928	11	22
1929	18	22
1930	9	16
1931	8	15
1932	6	18
1933	5	19
1934	7	8
1935	12	15
1936	11	13
1937	14	15

In 15 cases the cornea was affected :—

Twelve, referred as nebulæ, are making satisfactory progress. Some have cleared. The others are clearing, and in none of these cases will there be any permanent damage to the sight.

One had a corneal ulcer, when first seen by the ophthalmic nurse. He was a boy of $2\frac{1}{2}$ years, suffering from a septic skin condition. She advised the Royal Eye Hospital. He was admitted the same day, discharged six weeks later with faint nebula cornea, and has since been to a convalescent home.

At the end of the year there were two cases of serious eye disease following measles, and in each the sight of one eye has been lost.

All cases of corneal affection are visited regularly to see that no relapse has occurred and that the home care is satisfactory.

The cases of blepharitis were all slight.

Sunshine Home for Blind Babies.

During the year two children were maintained in the Sunshine Home for Blind Babies, Southport: one suffering from blindness following measles and one suffering from glioma was admitted in May.

The care of the child suffering from congenital microphthalmos and anophthalmos was transferred to the Education Department, as he attained the age of five years.

CHILD WELFARE CENTRES.

At the end of 1937 there were 21 municipal infant welfare centres, and one voluntary centre in the Holy Name schoolroom to which the City supplies the medical officer and the stationery. This centre is otherwise staffed by the Sisters of Charity of the Order of St. Vincent de Paul.

There are at the various centres 114 weekly medical consultations, comprising 77 infant sessions, 3 special birthday sessions, 6 sunlight, 23 ante-natal, and 5 toddlers' sessions, at which an attempt is made to secure only the attendance of children between 2 and 5 years of age.

At the end of the year there were on the centre register :—

5,615 children under 1 year.

4,447 children between 1 and 2 years.

6,622 children between 2 and 5 years.

67·7 per cent. of all Manchester children under 1 year attended at least once.

The tables show the work done at the Child Welfare Centres during the year 1937.

228,979 attendances were made at these sessions :—

118,433 by children under 1 year.

51,708 ,, between 1 and 2 years.

31,264 ,, ,, 2 and 3 ,,

18,428 ,, ,, 3 and 4 ,,

9,146 ,, ,, 4 and 5 ,,

Toddlers' Sessions.

A weekly examination session is set apart for children between 2 and 5 years of age at Newton Heath, Ancoats, and Openshaw Centres. To the parents in these wards, as their children reach 2 and 3 years of age, a card of invitation is delivered personally by the health visitor, who emphasises the need for continued medical supervision and urges them—if they are unable to obtain it otherwise—to bring their children for examination.

During 1937, 1,395 invitations were sent to 2 year olds, of whom 281 were brought for examination; and 1,326 were sent to 3 year olds, of whom 193 were brought for examination,

Massage and Remedial Exercises.

This work is performed by a staff of 9 full-time masseuses and, in addition, part-time masseuses for 9 sessions weekly.

Massage treatment is provided at 19 centres, where 50 sessions were held each week. At 9 centres a weekly class of remedial exercises is held for children from 2 to 5 years, for whom exercises are considered better than massage. The ailments treated are postural defects, rickety deformities, general or local poor muscular tone, and some of the milder birth injuries.

There were 25,939 attendances for massage, and 5,467 for remedial exercises.

Artificial Sunlight.

Ultra-violet light lamps are installed at four centres. Cases suitable for this treatment are referred to one of these from the other clinics.

In conjunction with the ultra-violet light, a modified form of radiant heat is given.

During the year, 1,386 children and 88 adults were treated with ultra-violet light, and the total attendances were 26,352.

109 of the children were under 1 year and these were given a prophylactic course of treatment.

The remaining cases were suffering from (a) rickets and tetany, and spasmophilia associated with this condition ; (b) bronchitis and catarrh ; (c) malnutrition, debility, and anæmia ; (d) nervous conditions.

The first group constituted the largest, numbering 358 children. As a general rule these cases were given at least three months' treatment, and all improved considerably, not only from their specific complaint, but in their general condition—sleep became more restful, appetite increased, and temper became more placid ; no cases had to be discharged owing to supersensitiveness.

Children in group (b) were also definitely improved, many were quite free from colds during treatment ; in others attacks were considerably fewer in number ; a small number did not seem to benefit appreciably. Treatment in this group consisted of short exposures continued over two or three months with an interval of rest between the courses.

Cases of malnutrition and debility responded well. The general condition was much improved, and, though in some cases increase in weight was small during the period of treatment, the child usually began to gain satisfactorily afterwards.

Several cases suffering from debility following pneumonia, whooping cough, and measles were treated, and the tonic effect in these cases cannot be over-estimated.

The adults treated were mainly ante-natal cases. These patients were suffering from depression and low spirits, nervousness, loss of appetite, lack of energy, neuritis. The results in these cases were rapid and most satisfactory.

Of 308 cases who returned for re-examination, 26 were not considered satisfactory and were given a further course of treatment.

Dental Clinics.

A session for dental treatment of nursing and expectant mothers and one for children has been held weekly at Rosamond Street and Cheetham Centres. Patients are referred from the welfare centres.

A general routine inspection for children has not yet been arranged. Children with suspected or beginning dental caries are referred from the welfare centres to the dental clinic, where preliminary dental treatment is given. The parents then receive regular three or six-monthly invitations to bring them for further inspection and treatment until they reach the age of 5 years. The welfare centres are notified when these appointments are not kept.

At the beginning of the year there were 356 children under 5 in attendance at the dental clinics. 945 new cases were referred for treatment from the welfare centres. 261 failed to attend. 684 new children attended for treatment. 384 were marked off on reaching 5 years of age and 227 because they ceased to attend. 429 names remained on the register at the end of the year. 1,614 attendances were made.

The response to the offer of dental treatment varies in different centres :—

Centre	Number referred	Number failed to attend	Number attended
Abbey Hey	23	8	15
Ardwick	60	21	39
Ancoats	35	15	20
Blackley	27	9	18
Clayton	42	14	28
Collyhurst	38	14	24
Chorlton-cum-Hardy	44	6	38
Cheetham	54	8	46
Chorlton-upon-Medlock	80	20	60
Didsbury	19	4	15
Miles Platting	25	7	18
Gorton	28	12	16
Hulme	22	5	17
Harpurhey	36	10	26
Holy Name	4	2	2
Levenshulme	34	3	31
Northenden	121	40	81
Newton Heath	61	9	52
Openshaw	53	21	32
Rusholme	72	19	53
Wilbraham	8	3	5
Withington	59	11	48
Totals	945	261	684

During 1937, 430 mothers made 1,184 attendances. 271 others failed to keep any appointment and received no treatment. The condition of the mouths is such that usually only extractions can be done.

Systematic talks on the influence of diet on dental structure and the prevention of caries are given at all the centres and at the dental clinics.

Cookery demonstrations.

It is recognised that one of the causes of ill-health of young children—as well as of the rest of the family—is an unsuitable diet, and cookery demonstrations were provided at 10 of the infant welfare centres, where mothers can be taught the value of food, and its preparation, while their young children are “minded” on the premises. An elementary knowledge of dietetics is taught, and an appreciation of the importance of well-planned and properly cooked meals.

At the Northenden Centre there are two cookery sessions a week. This centre is fortunate in having two kitchens. In one there is a Triplex grate and a gas stove, and in the other an electric cooker. At one session a week the ordinary demonstration is given; at the other, the mothers do the cooking in the presence of the demonstrator. This class, which was begun at the request of the mothers, is much appreciated.

The kindergarten classes held in this centre have proved of great value in the observation and management of difficult toddlers. The centre has been most fortunate in obtaining the voluntary services of certificated teachers for this work.

Voluntary Workers.

During the year 308 voluntary workers gave valuable assistance at the child welfare centres. The total number of attendances of these workers for the year was 11,507, an average of 3 workers per session.

The department is greatly indebted to the voluntary workers supplied by the Schools for Mothers for the cordial co-operation they give in the work of the centres by entering the new babies, registering the attendances, and charting the heights and weights of the children.

At Ancoats and Rosamond Street the Schools for Mothers held sewing classes during the winter, and 499 attendances were made.

In 1936, the Schools for Mothers opened a holiday home at Oakleigh, Marple, for mothers with their babies. In 1937 it had a very successful year, and 103 mothers and 178 children had a holiday there of one or two weeks' duration. The home was full to capacity during the summer months, and had some visitors every month except December.

The charges are 17s. 6d. a week for the mothers, 2s. 6d. for children under 2 years of age, and 5s. for older ones up to 5 years of age. 1s. is charged for a baby who is breastfed, or for whom dried milk is brought.

The Schools for Mothers is to be congratulated on the success of this piece of pioneer work.

It is difficult to give an adequate conception of the great amount of devoted work carried out by the Schools for Mothers, but we gratefully acknowledge the very large and important contribution made by this Society to the work of maternity and child welfare in the City.

Ante-natal Clinics.

There are now ante-natal clinics established at 16 centres, where 23 sessions are held weekly. Bi-weekly sessions are held at Openshaw, Rusholme and West Gorton; at Higher Ardwick and Hulme they are combined with V.D. treatment for mothers and children. 3,831 new mothers were admitted and 16,296 attendances were made.

In addition to the ante-natal sessions provided at the infant welfare centres, there are municipal ante-natal clinics established at Crumpsall and Withington Hospitals (see pages 201 and 242).

Post-natal Clinics.

The after-effects of child-birth continue to give rise to concern and every attempt was made to secure the attendance of mothers for a post-natal examination at one of the 16 ante-natal centres. 506 presented themselves for complete examination at four to six weeks after confinement. The results were as follows :—

RESULTS OF POST-NATAL EXAMINATIONS.

1. Total number of cases examined	506
2. ,, ,, recovered	210
3. ,, ,, not recovered	257
4. ,, ,, not fully examined	39
5. Number of defects found	569
6. General post-natal conditions :—	
(A) Satisfactory	316
(B) Unsatisfactory.. .. .	190
(i.) Due to labour—	
(a) Backache	32
(b) Anæmia	54
(c) Any other condition	96
(ii.) Due to old-standing disease	37

7. Local pelvic conditions :—

(A) Satisfactory	271
(B) Unsatisfactory.. .. .	200
(c) Not examined	35
(i.) Prolapse	10
(ii.) Retroversion	77
(iii.) Subinvolution	48
(iv.) Cervical tears	53
(v.) Rectocele	11
(vi.) Cystocele	25
(vii.) Leucorrhœa.. .. .	37
(viii.) Perineal tears	29
(ix.) Any other condition	22

8. Evidence of renal disease :—

(A) A.N. albuminuria	67
(i.) Recovered	56
(ii.) Not recovered	9
(iii.) Not examined	2
(B) Albuminuria P.N. only.. .. .	3
(c) A.N. Hyperpiesis	17
(i.) Recovered	7
(ii.) Not recovered	10
(iii.) Not examined	—
(D) Hyperpiesis P.N. only	5

Ante- and Post-natal Exercises.

Exercises for mothers during the ante- and post-natal periods are held at four of the infant welfare centres. At Rusholme and Northenden the exercises are given by a part-time masseuse in the employ of the department. At Levenshulme and Withington, by an arrangement with Ancoats Hospital, members of the staff of the Physio-therapy Department have continued to conduct these classes. The attendances were—at Rusholme 258, at Northenden 402, at Levenshulme 284, and at Withington 368.

The purpose of this treatment is to restore the mother to a satisfactory state after her pregnancy and confinement. The abdominal wall, pelvic floor, and soft tissues are stimulated and their tone restored by massage and exercises. Backache resulting from spinal and sacroiliac strain is also helped by treatment.

The mothers come about a month after the confinement, and graduated exercises and massage are begun. After a few weeks the mother can do quite a reasonable course of exercises, and her bodily mechanics and general health are improved.

The Superintendent of the Physio-therapy Department reports :—

Levenshulme Clinic.

The work in the clinic has been highly satisfactory.

Number of cases for the year	.. .. .	53
Number of attendances	.. .. .	284

Of these, 38 were ante-natal and 15 post-natal attendances.

The greater part of these cases were first pregnancies and the ante-natal attendances were very good.

Where the mother could not attend after the birth of the baby, instructions were given and she continued the exercises at home. Conditions treated were weak musculature and backache in the later stages of pregnancy. These improved with treatment.

Withington Clinic.

The Keep Fit and Post Natal Classes were taken over by one of the Masseuses on the staff of the M. & C.W. Section in September, 1937.

Lady Mayoress's Shield.

The Lady Mayoress of Manchester in 1933—Mrs. Davidson Peattie—presented a shield for competition amongst the welfare centres, to be held for a year by the centre judged to have done the best work.

The Committee decided to institute an annual series of competitions, covering the whole of the activities of the centres, and to award the shield to the centre that obtained the highest number of marks.

The marks were awarded for attendances at the centres, for breast-feeding, for immunisations, for *viva-voce* examination in mothercraft, for garments (both new, and made from old garments), for dinner menus, stews, bread, toys, household gadgets, etc.

In the 1936 year's competitions, Newton Heath Centre obtained the highest marks. This centre therefore holds the shield for 1937.

Immunisation against Diphtheria.

At the infant welfare centres immunisation is carried out by the centre doctors, and periodic campaigns are held to stimulate the interest of parents. Although school children are immunised at the schools, there is still an increasing demand for the immunisation of children under school age at the child welfare centres. (See page 37).

AILING CHILDREN.

Hospital Treatment and Follow-up Work.

Twenty beds for children under 1 year and 10 for children between 1 and 2 years are retained at the Manchester Babies' Hospital (see page 329).

350 beds for children under 5 years are provided at the Booth Hall Hospital.

Since the transfer of Booth Hall Hospital to the public health authority in 1930, the names of children under 5 years of age discharged from Booth Hall have been notified to the Maternity and Child Welfare Department, so that "follow-up" visits could immediately be paid by the health visitors.

REMEDIAL DAY NURSERIES.

Two such nurseries are maintained by the Schools for Mothers, one next door to the Openshaw Centre and one (the Spence Nursery) in the grounds of the University Settlement at Ancoats. The nurseries are maintained for children between 18 months and 5 years suffering from rickets, malnutrition, and debilitated conditions. Cases for these nurseries are recommended by the centre doctors. The children are retained until they are well or reach 5 years of age.

The Corporation retains 5 beds at each of the nurseries.

Openshaw Day Nursery.

Total number of places for children under 5 years ..	13
„ „ whole day attendances	2,015
„ „ individual children who attended ..	19
Number of individual children admitted as Corporation cases	11

(The period of stay varied from 2 weeks to 46 weeks.)

Spence Day Nursery.

Total number of places for children under 5 years ..	22
„ „ whole day attendances	3,444
„ „ individual children who attended ..	36
Number of individual children admitted as Corporation cases	14

(The period of stay varied from 1 day to 12 months.)

ANTE-NATAL CASES AT CENTRES AND RESULTS IN DELIVERY.

CENTRES	No. on Register Jan. 1st, 1937	No. of New Cases	Transferred from another Centre	TOTAL	No. still on Register Jan. 1st, 1938	No. of Term Births	Still-births included in Term Births	No. of Premature Births	Still-births included in Premature Births	No. of Mothers left District before Confinement	Transferred to another Centre	No. of Mothers not Pregnant	TOTALS
Ancoats	37	200	1	238	39	174	7	11	6	7	—	7	238
Ardwick	50	280	2	332	78	203	5	29	3	12	1	8	331+1*
Blackley	—	44	17	61	38	21	—	—	2	—	—	—	61
Chorlton-upon-Medlock ..	77	272	2	351	68	225	5	13	9	20	5	19	350+1*
Collyhurst	37	254	2	293	73	189	2	14	5	4	2	11	293
Cheetham	64	268	—	332	109	170	3	5	—	34	5	9	332
Clayton	53	198	—	251	47	163	3	23	6	2	1	15	251
Gorton	79	362	—	441	118	254	7	27	4	20	3	19	441
Harpurhey	62	326	—	388	88	227	8	30	12	10	15	18	388
Hulme	15	91	1	107	25	67	—	8	7	3	2	2	107
Levenshulme	70	199	2	271	53	204	5	7	3	4	—	3	271
Newton Heath	47	224	4	275	81	155	1	6	3	12	4	17	275
Openshaw	80	415	5	500	120	326	12	35	16	5	—	14	500
Rusholme	55	223	3	281	67	172	4	5	3	23	2	12	281
Withington	51	238	2	291	81	186	6	6	1	5	—	13	291
Northenden	61	237	7	305	66	184	4	20	11	4	2	28	304+1*
	838	3,831	48	4,717	1,153	2,920	62	239	91	165	42	195	4,714+3

* Died before delivery.

ANTE-NATAL CASES AT CENTRES AND NUMBER ATTENDING FOR
POST-NATAL EXAMINATION.

Centre	No. of Normal Births	No. of Abnormal Births	Died	Attended for Post-natal Examination
Ancoats	160	25	—	16
Ardwick	181	51	2	20
Blackley	20	1	—	9
Chorlton-upon-Medlock .	203	35	1	38
Collyhurst	171	32	1	10
Cheetham	155	20	—	29
Clayton	168	18	—	10
Gorton	235	46	—	49
Harpurhey	223	34	2	58
Hulme	53	22	—	2
Levenshulme	180	31	1	27
Newton Heath	142	19	—	43
Openshaw	287	74	1	30
Rusholme	162	15	2	53
Withington	166	26	—	43
Northenden	168	36	1	69
Totals	2,674	485	11	506

*Causes of Deaths of Mothers attending the Centre Ante-Natal Clinics
during the Year, 1937.*

Influenza, broncho-pneumonia	3
Eclampsia	1
Post-partum hæmorrhage	2
Bilateral pulmonary T.B.	1
Septicæmia	1
Concealed and revealed A.P.H. toxæmia of pregnancy ..	1
Congestive heart failure; asthma (spasmodic)	1
Cardiac failure due to post-operative shock	1

COMPARISON OF CHILDREN IN AGE GROUPS ATTENDING THE WELFARE CENTRES, DECEMBER 31ST, 1937.

Centre	On Register at beginning of 1937			New Cases			Died	Marked off— Not attending			On Register, December 31st, 1937		
	0—1	1—2	2—5	0—1	1—2	2—5		0—1	1—2	2—5	0—1	1—2	2—5
Abbey Hey	130	100	157	217	50	58	11	13	59	94	166	131	191
Ancoats	211	167	261	367	98	168	21	48	117	258	261	196	287
Ardwick	377	277	345	538	102	174	38	105	230	295	379	278	366
Blackley	218	180	255	362	66	120	12	13	151	211	265	191	280
Chorlton-upon-Medlock .	410	301	467	612	147	223	22	104	213	386	434	348	500
Cheetham.. .. .	261	189	251	394	102	135	19	65	154	218	274	220	330
Clayton	215	132	135	281	39	85	8	49	123	109	216	133	193
Collyhurst	232	143	204	353	87	113	27	65	139	172	246	186	218
Chorlton-cum-Hardy ..	148	140	217	238	32	87	9	28	46	142	163	155	229
Didsbury	99	90	139	139	28	46	1	16	42	76	97	108	149
Gorton	332	258	371	502	85	169	26	53	196	344	354	268	347
Harpurhey	287	205	302	404	58	129	16	59	147	199	293	228	341
Holy Name	31	35	43	42	6	13	2	8	12	27	25	25	61
Hulme	229	127	151	287	59	80	26	58	136	162	187	156	164
Levenshulme	291	219	387	468	59	117	11	53	162	213	337	227	410
Miles Platting.. .. .	139	86	84	194	44	79	9	30	70	98	131	119	130
Newton Heath	301	255	369	431	82	236	10	68	132	256	307	287	492
Northenden	333	284	435	610	159	363	14	44	210	355	444	339	621
Openshaw	339	227	341	458	76	178	20	68	174	275	340	270	382
Rusholme.. .. .	340	239	352	484	84	158	15	105	181	282	325	267	363
Wilbraham	55	54	72	100	22	59	2	8	28	87	72	57	85
Withington	274	249	431	375	68	180	6	49	107	243	299	258	483
Totals	5,252	3,957	5,769	7,856	1,553	2,970	323	1,114	2,829	4,502	5,615	4,447	6,622

COMPARATIVE TABLES FOR PREVIOUS TWO YEARS :—

1936	5,213	3,963	5,789	7,400	1,425	2,911	337	1,349	3,448	5,637	5,252	3,957	5,769
1935	5,095	3,720	5,952	7,312	1,441	2,887	297	1,428	3,243	5,573	5,213	3,963	5,789

COMPARISON OF REGISTERED BIRTHS AND BABIES UNDER
1 YEAR ATTENDING THE CENTRES DURING 1937.

Ward	Births	New Cases (at Centres) under 1 Year	Per cent.
All Saints	339	238	70.2
Ardwick	409	224	54.7
Beswick	428	215	50.2
Blackley	283	168	59.3
Bradford	454	357	78.6
Cheetham	275	215	78.1
Chorlton-cum-Hardy	365	262	71.8
Collegiate Church	225	133	59.1
Collyhurst	232	155	66.8
Crumpsall	261	202	77.4
Didsbury	288	218	75.7
Exchange	4	—	—
Gorton North	278	195	70.1
„ South	336	234	69.6
Harpurhey	344	248	72.1
Levenshulme	226	197	87.2
Longsight	290	128	44.1
Medlock Street	415	260	62.7
Miles Platting	333	209	62.8
Moston	347	217	62.5
Moss Side East	314	216	68.8
„ „ West	272	184	67.6
New Cross	397	296	74.6
Newton Heath	228	188	82.5
Openshaw	302	159	52.6
Oxford	16	—	—
Rusholme	230	157	68.3
St. Ann's	—	—	—
St. Clement's	25	24	96.0
St. George's	470	252	53.6
St. John's	46	40	87.0
St. Luke's	391	314	80.3
St. Mark's	344	305	88.7
St. Michael's	333	200	85.8
Withington	496	350	70.6
Wythenshawe	758	520	68.6
Totals	10,754	7,280	67.7

DISTRIBUTION OF MILK.

Milk was supplied to necessitous nursing and expectant mothers and to children under 5 years who were attending a centre, and for whom the doctor at the centre certified that milk was necessary on grounds of health.

Both dried and fresh milk were used. The dried milk was bought in bulk from the manufacturers and distributed through the centres. The fresh milk was delivered by the retailers; usually one retailer for each centre. The selection was made from a list of those who had satisfactory pasteurising plant. Only pasteurised milk was ordered.

The milk was granted to applicants, after investigation, either "free" or "assisted" (half-price), according to income.

MATERNITY BEDS.

In each of the two large general hospitals—Crumpsall and Withington Hospitals—the city maintains a maternity unit. These together provide 230 beds.

In addition to these the Public Health Committee maintains eight maternity beds (2 in St. Mary's Hospital for first and abnormal cases, 2 in Denison House, 2 in Crossley Hospital and 2 in Beech Mount).

During the year 114 applications were received for these beds. 15 of these were cancelled and 2 were not accepted, as the applicants resided outside the City area. Of the remaining 97, 68 were confined during the year.

HOME HELPS.

The arrangements for the supply of home helps in Manchester are made by the Manchester Home Helps Society.

The Society is subsidised by the Public Health Committee.

During the year 1937, 16 home helps attended 111 cases for a total of 222 weeks, this being an average of 2 weeks per case.

The amount received in fees was £149 4s. 6d.

The helps are remunerated at the rate of 30s. per week, plus travelling expenses and insurance. They receive no retaining fee when unemployed.

Twenty-six free home helps were granted by the Public Health Committee. These cases extended over a period of 51½ weeks.

The remainder of the cases dealt with by the Society paid the costs of the home helps to the extent shown in the following table :—

Cases	No. of Weeks Attended	Rate per Week	Amounts Paid by Patients
		£ s. d.	£ s. d.
1	2	0 2 6	0 5 0
3	6	0 5 0	1 10 0
2	4	0 6 0	1 4 0
7	14	0 7 0	4 18 0
1	2	0 7 6	0 15 0
3	6	0 8 0	2 8 0
1	2	0 9 0	0 18 0
17	33	0 10 0	16 10 0
3	6	0 12 0	3 12 0
1	2	0 12 6	1 5 0
3	6	0 14 0	4 4 0
8	17	0 15 0	12 15 0
1	2	0 16 0	1 12 0
6	12	1 0 0	12 0 0
1	2	1 2 0	2 4 0
1	2	1 2 6	2 5 0
2	4	1 5 0	5 0 0
19	36½	1 10 0	54 15 0
3	6	1 15 0	10 10 0
1	3	1 15 6	5 6 6
1	3	1 16 0	5 8 0
85	170½	..	£149 4 6

Applications are made either through the infant welfare centres or direct to the Secretary of the Home Helps Society. All applications are investigated by officers of the Maternity and Child Welfare Section. If not suitable for a free home help, in accordance with the income scale applicable to grants of milk under the Child Welfare Scheme, the information is passed on to the secretary of the society, who assesses payment.

SUMMARY OF WORK OF INVESTIGATORS FOR 1937.

No. of visits in connection with milk investigations	..	..	..	New cases	..	24	}	43
				Reinvestigations		19		
„ milk investigations at centres	..	..	..	New cases	..	3,739	}	23,642
				Reinvestigations		19,903		
„ visits <i>re</i> day nursery investigations	..	..	..	New cases	..	7	}	104
				Reinvestigations		37		
„ day nursery investigations at centres	..	..	..	New cases	..	29	}	2
				Reinvestigations		31		
„ visits <i>re</i> deaf school investigations	..	..	..	New cases	..	1	}	2,530
				Reinvestigations		1		
„ visits <i>re</i> medical fees	..	..	..	New cases	..	2,012	}	214
„ visits <i>re</i> medical fee accounts not paid	..	..	..	Reinvestigations		501		
„ investigations of medical fees at centres	..	..	..	New cases	..	17	}	20
„ investigation visits <i>re</i> home helps	..	..	..	New cases	..	44		
„ investigations <i>re</i> home helps, at centres	..	..	..	New cases	..	170	}	109
„ investigation visits <i>re</i> municipal maternity beds	..	..	..	New cases	..	13		
				Reinvestigations		7	}	253
„ investigations at centres <i>re</i> municipal maternity beds	..	..	..	New cases	..	109		
„ investigation visits <i>re</i> midwives' fees in necessitous cases..	..	..	..	New cases	..	67	}	26,917
„ investigations at centres <i>re</i> midwives' fees in necessitous cases	..	..	..	New cases	..	186		

Mothercraft Exhibition.

The Maternity and Child Welfare Mothercraft Exhibition is now made up of—

1. A Clothing Exhibition, showing model garments for—

1—4 months.
4—12 months.
1—2 years.
2—3 years.
3—5 years.
Belts, etc., for mothers.
2. Model diets for—

8—10 months.
10—12 months.
1—2 years.
2—5 years.
Expectant and nursing mothers.

Diets of three meals for two complete days are given. The necessary amount of foods to give the correct calories and vitamin contents were first worked out. Foodstuffs in these quantities were then cooked. Models in wax and other substances were then made.

The diets have been revised during the year. Explanatory posters and cards accompany the models.

3. A small "household gadgets" section.

4. A "safety first" section, made up of model rooms, showing how accidents occur, and how they may be prevented.

This shows—

Living-room dangers.

Bedroom dangers.

Washing-day dangers.

Bathroom dangers.

Garden dangers.

5. How to escape from a house on fire.

This shows two models of houses and the various ways of preventing fires, and how to escape in case of fire. Explanatory leaflets, which are given to the mothers, accompany this section.

6. Home nursing exhibition shows two models of cots containing dolls, used for the purpose of giving demonstrations in home nursing and the care of the patient.

The exhibition is divided so that a small part of it is shown each fortnight at a centre, *i.e.*, an age group of clothing is followed by the model diets for an age group. In this way an individual centre is not overcrowded by a large exhibition, and the fortnightly changes receive a steady attention from the mothers that a permanent exhibition could not have.

Patterns or knitting directions have been made of all the model garments, and have been sold to mothers at a small charge. Crumpsall and Withington Ante-natal Clinics also use the maternity belt, etc., patterns, and the 1—4 months set; and various patterns have been sent by request to other local authorities. In 1937, 3,057 patterns were sold.

The Maternity and Child Welfare Exhibition Diet, Safety First, and How to Escape from Fire have been shown at The Central Library, Manchester, from 16th August to September 11th, 1937, where some 22,436 people visited it, and at Chadderton from October 18th to 21st, and at Rochdale from November 17th to 20th,

The diet exhibition was visited at the Public Health Department, Sunlight House, Manchester, by students of the Domestic College, Manchester, on March 5th, 1937, and also by doctors and by voluntary helpers from Bolton. The diet exhibition was lent on October 3rd, 1937, to the College of Domestic Science.

Wherever the exhibition has been displayed great enthusiasm has been shown for this method of teaching mothercraft.

INFANT LIFE PROTECTION.

PUBLIC HEALTH ACT, 1936. INFANT LIFE PROTECTION.

Children Nursed for Hire or Reward during the Year 1937.

Number of foster-mothers on the register at the beginning of the year	167
Number of foster-mothers on the register at the end of the year	160
Number of children on the register at the beginning of the year..	205
„ „ placed on the register during the year ..	251
	<hr/> 456
„ „ who ceased, during the year, to come under the Infant Life Protection Provisions of this Act.. .. .	270
„ „ remaining on the books at the end of the year	186

Details as to the number of children who ceased during the year, to come under the Infant Life Protection Provisions of this Act.

Returned to parents or relatives	178
Attained the age of 9 years	21
Adopted without payment	19
Sent to special homes	6
Admitted to hospitals	27
Removed to other districts	18
Deaths	1
	<hr/> 270

Licences Granted.

Licensed for two children	7
„ „ one child	73
„ „ two children for six months	1
„ „ one child for four months	1
„ „ „ „ three months	19
„ „ „ „ two months	2
„ „ „ „ one month	1
Licences renewed permanently	6
	<hr/> 110

Licences refused	2
Cautions	10

Adoptions.

By foster-mothers	8
By other persons	11
	<hr/> 19

PROVISION OF MILK FREE OR AT REDUCED COST DURING THE YEAR 1937, COMPARED WITH 1936.

SHOWING NUMBER OF CASES RECEIVING MILK, AMOUNT SUPPLIED, COST, AND MODE OF DISTRIBUTION.

			St. George's School, Abbey Hey Lane	135, Pollard St., Ancoats	45, Higher Ardwick	U.M. School, Market Street, Blackley	153, Cheetham Hill Road	Baptist School, Chorlton- cum-Hardy	72, Rosamond Street, C.-ou-M.	26, Clayton Street, Clayton	113, Collyhurst Street, Collyhurst	Liberal Club Barlow Moor Rd., Didsbury	230, Hyde Road, West Gorton	Jubilee School, Harpurhey	42, Lower Moss Lane, Hulme	St. Peter's School, Levens- hulme	Elm Street School, Miles Platting	686, Oldham Rd., Newton Heath	Beech House, Northenden	1, Manipur St., Openshaw	Welsh Church, Moss Side	Community Hall, Hart Rd., Fallowfield	25, Heaton Road, Withington	Totals
Number of New Cases put on Milk	Fresh Milk	1936.. ..	30	135	156	61	91	45	278	64	165	22	117	77	96	82	47	108	70	188	155	23	68	2,078
		1937.. ..	33	109	182	70	131	20	235	55	173	8	117	74	105	63	24	84	68	174	113	20	43	1,901
	Dried Milk	1936.. ..	23	171	259	55	147	35	283	64	76	1	143	100	123	45	85	31	90	79	138	10	40	1,998
		1937.. ..	22	270	226	50	152	31	294	90	124	11	111	117	91	97	89	53	146	92	142	10	55	2,273
Number of Attendances when Milk was supplied	Fresh Milk	1936.. ..	1,250	3,470	5,006	1,314	3,932	1,374	7,503	2,850	4,680	860	5,560	2,562	2,109	4,040	1,026	3,682	1,825	5,109	4,772	564	3,316	66,804
		1937.. ..	1,099	2,637	4,751	2,009	3,557	1,137	7,276	2,472	4,062	756	4,587	1,835	1,773	2,779	867	3,078	1,611	3,915	3,517	469	2,605	56,792
	Dried Milk	1936.. ..	712	4,441	7,706	1,099	3,575	931	10,510	2,459	3,647	24	4,625	2,446	3,307	2,112	1,723	1,958	1,957	2,584	3,801	210	1,239	61,566
		1937.. ..	467	7,080	7,263	2,032	3,988	1,274	10,713	2,573	4,123	241	4,064	2,969	2,708	2,582	2,147	1,899	2,604	3,602	3,332	353	1,625	67,639
Amount of Milk supplied (pints or lbs.)	Fresh Milk	1936.. ..	8,933	24,450	35,719	9,489	28,642	9,638	54,438	20,918	32,918	6,017	39,553	19,100	14,771	28,348	7,728	25,967	13,294	36,323	33,666	4,161	24,390	478,463
		1937.. ..	7,918	18,626	34,387	14,495	26,209	8,396	51,876	17,753	28,659	5,389	33,464	13,847	12,415	19,506	6,693	21,842	11,397	28,179	24,643	3,337	19,014	408,045
	Dried Milk	1936.. ..	831	5,221	8,908	1,300	4,194	1,038	11,933	2,913	4,456	32	5,352	2,949	3,822	2,376	2,091	2,488	2,287	3,101	4,379	268	1,454	71,393
		1937.. ..	560	8,176	8,344	2,411	4,696	1,496	12,125	2,974	4,809	319	4,805	3,449	3,255	2,993	2,598	2,367	2,979	4,379	3,740	409	1,873	78,757
Total Cost to Corporation	Fresh Milk	1936.. ..	£ s. d. 80 14 11	£ s. d. 242 8 2	£ s. d. 326 16 2	£ s. d. 92 5 5	£ s. d. 301 5 7	£ s. d. 94 15 1	£ s. d. 535 15 2	£ s. d. 208 9 1	£ s. d. 308 13 10	£ s. d. 70 19 11	£ s. d. 375 12 4	£ s. d. 162 5 8	£ s. d. 147 5 7	£ s. d. 275 10 0	£ s. d. 63 1 10	£ s. d. 245 1 7	£ s. d. 123 3 8	£ s. d. 343 0 5	£ s. d. 342 2 5	£ s. d. 44 7 7	£ s. d. 272 19 1	£ s. d. 4,656 13 6
		1937.. ..	71 7 4	181 13 3	317 3 4	148 19 7	276 11 5	87 13 6	514 7 4	175 0 0	271 18 6	66 18 5	297 19 8	126 0 3	114 5 1	195 8 2	56 3 6	209 9 3	112 0 0	267 10 1	241 13 4	38 12 2	200 13 4	3,971 7 6
	Dried Milk	1936.. ..	25 18 8	175 6 2	324 5 5	45 9 10	172 3 1	38 12 3	452 0 9	110 5 9	150 15 2	1 3 5	196 11 9	101 8 5	144 14 7	90 16 9	61 18 1	86 3 0	89 17 9	125 3 7	172 9 4	11 5 6	57 2 9	2,533 12 6
		1937.. ..	18 8 3	256 4 0	301 14 3	82 18 6	185 15 10	52 2 4	445 15 11	100 9 5	155 3 5	11 13 8	169 17 1	111 1 0	106 5 9	109 11 1	72 16 11	81 3 11	103 6 2	156 4 5	137 19 10	15 10 2	63 18 9	2,743 0 8
Total Cost ..	Fresh and Dried Milk	1936.. ..	106 13 7	417 14 4	651 1 7	137 15 3	473 8 8	133 7 4	987 15 11	318 14 10	459 9 0	72 3 4	572 4 1	263 14 1	292 0 2	366 6 9	124 19 11	331 4 7	213 1 5	468 4 0	514 11 9	55 13 1	330 1 10	7,290 5 6
		1937.. ..	89 15 7	437 17 3	618 17 7	231 18 1	462 7 3	139 15 10	960 3 3	275 9 5	427 1 11	78 12 1	467 16 9	237 1 3	220 10 10	304 19 3	129 0 5	290 13 2	215 6 2	423 14 6	379 13 2	54 2 4	269 12 1	6,714 8 2

STATEMENT OF WORK DONE AT THE CHILD WELFARE CENTRES DURING THE YEAR 1937.

	Year	Abbey Hey	Ancoats	Ardwick	Blackley	Cheetham	Chorlton-cum-Hardy	Clayton	Chorlton-upon-Medlock	Collyhurst	Didsbury	West Gorton	Harpurhey	Holy Name	Hulme	Levenshulme	Elm Street	Newton Heath	Northenden	Openshaw	Rusholme	Wilbraham	Withington	Totals
Consultations	1937	2,815	4,208	5,751	B 3,221	3,746	2,706	2,864	C 7,628	3,388	1,974	5,107	4,991	765	2,372	4,393	1,658	5,010	F 5,225	5,456	5,296	1,109	5,652	85,335
	1936	2,527	3,663	5,985	2,798	3,770	2,691	2,796	6,879	3,788	1,692	5,799	5,091	884	2,843	4,450	1,775	5,724	4,388	6,106	5,568	1,019	5,654	85,890
Babies weighed only ..	1937	4,197	4,967	9,418	6,718	5,519	5,850	3,876	12,374	5,757	3,543	8,628	6,624	947	4,471	9,285	2,756	8,823	11,110	6,448	9,235	1,868	11,230	143,644
	1936	3,741	4,868	10,790	5,131	5,286	5,347	3,857	13,318	6,179	2,931	9,924	7,398	1,221	4,906	10,031	2,744	7,467	8,959	5,960	10,233	1,731	10,948	142,970
Total attendances	1937	7,012	9,175	15,169	9,939	9,265	8,556	6,740	20,002	9,145	5,517	13,735	11,615	1,712	6,843	13,678	4,414	13,833	16,335	11,504	14,531	2,977	16,882	228,979
	1936	6,268	8,531	16,775	7,929	9,056	8,038	6,653	20,197	9,967	4,623	15,723	12,489	2,105	7,749	14,481	4,519	13,191	13,347	12,066	15,801	2,750	16,602	228,860
Individuals who attended Centres	1937	575	936	1,284	898	1,019	648	654	1,592	779	417	1,207	1,043	145	677	1,161	461	1,297	1,688	1,205	1,188	274	1,185	20,333
	1936	529	949	1,465	826	995	684	697	1,657	871	386	1,399	1,047	157	783	1,165	451	1,337	1,498	1,278	1,290	254	1,264	20,982
Number of attendances for Massage	1937	985	1,027	1,719	1,001	1,401	991	685	1,400	1,813	D 9	1,929	1,607	..	1,035	1,268	817	2,071	1,603	1,878	1,265	..	1,435	25,939
	1936	1,195	1,425	2,000	691	1,674	792	1,256	1,650	2,029	..	1,380	1,704	..	1,370	1,335	873	2,023	998	2,286	1,819	..	1,246	27,746
Number of Attendances for Remedial Exercises ..	1937	567 Children .. Mothers	..	..	..	363 Children .. Mothers	H 391 Children .. Mothers	373 Children .. Mothers	534 Children .. Mothers	..	..	..	..	..	.. Children .. Mothers	760 Children 284 Mothers	..	..	1,040 Children 402 Mothers	..	687 Children 258 Mothers	..	752 Children 368 Mothers	5,467 Children 1,312 Mothers
	1936	581 Children .. Mothers	..	..	..	346 Children .. Mothers	..	394 Children .. Mothers	468 Children .. Mothers	..	..	..	..	..	.. Children 60 Mothers	983 Children 302 Mothers	..	..	442 Children 682 Mothers	..	724 Children 226 Mothers	..	550 Children 210 Mothers	4,488 Children 1,480 Mothers
Number of Attendances for Sunlight	1937 .. .. .	..	..	9,043	..	4,770	..	..	8,390	..	..	..	..	..	..	..	..	4,149	..	..	..	..	..	26,352
	1936 .. .. .	..	..	7,818	..	4,535	..	..	8,573	..	..	..	..	..	..	..	..	3,788	..	..	..	..	..	24,714
Number of Attendances at Cookery Classes	1937 .. .. .	..	486	391	..	..	..	279	477	..	..	264	..	..	273	..	..	605	782	299	..	..	307	4,163
	1936 .. .. .	..	399	411	..	..	..	233	693	S 158	..	376	..	..	226	..	..	466	572	346	..	..	332	4,212
Number of Attendances at Ante-natal Clinics	1937 .. .. .	..	851 A.N. 20 P.N.	1,049 A.N. 33 P.N.	A 178 A.N. 12 P.N.	794 A.N. 36 P.N.	..	841 A.N. 11 P.N.	1,057 A.N. 92 P.N.	1,109 A.N. 6 P.N.	..	1,488 A.N. 71 P.N.	E 1,311 A.N. 66 P.N.	..	409 A.N. 12 P.N.	1,128 A.N. 16 P.N.	..	1,023 A.N. 49 P.N.	901 A.N. 85 P.N.	1,654 A.N. 37 P.N.	1,184 A.N. 86 P.N.	..	G 1,319 A.N. 50 P.N.	16,296 A.N. 682 P.N.
	1936 .. .. .	..	792 A.N. 23 P.N.	908 A.N. 74 P.N.	..	682 A.N. 39 P.N.	..	848 A.N. 14 P.N.	1,077 A.N. 173 P.N.	893 A.N. 14 P.N.	..	1,426 A.N. 138 P.N.	1,068 A.N. 62 P.N.	..	474 A.N. 29 P.N.	1,093 A.N. 21 P.N.	..	1,043 A.N. 64 P.N.	688 A.N. 62 P.N.	1,313 A.N. 52 P.N.	1,016 A.N. 92 P.N.	..	950 A.N. 67 P.N.	14,271 A.N. 924 P.N.
Number of Attendances at V.D. Clinics	1937 .. .. .	..	..	1,061	..	..	..	..	..	..	..	..	..	..	870	..	..	..	..	..	..	..	..	1,931
	1936 .. .. .	..	..	1,437	..	..	..	..	..	..	..	..	..	..	622	..	..	..	..	..	..	..	..	2,059
Number of Attendances at Dental Clinics	1937 .. .. .	..	..	..	..	379 Mothers 670 Children	..	..	805 Mothers 944 Children	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1,184 Mothers 1,614 Children
	1936 .. .. .	..	..	..	..	438 Mothers 649 Children	..	..	948 Mothers 1,031 Children	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1,386 Mothers 1,680 Children

A—New ante-natal session began Aug. 24th, 1937.

B—New infant session began Nov. 21st, 1937.

C—New infant session began Nov. 1st, 1937.

D—New massage session began Dec. 7th, 1937.

E—Extra ante-natal session began Dec. 2nd, 1937.

F—New infant session began Nov. 2nd, 1937.

G—Extra ante-natal session began Dec. 7th, 1937.

H—Remedial exercises session began Jan. 7th, 1937.

S—Cookery session closed March 20th, 1936.

The majority of nurse children are illegitimate. Of the 251 new cases on the books in the last 12 months, only 66 were legitimate.

The number of visits paid by the infant life protection officer to nurse children during the year was 931; visits paid by health visitors in connection with the work were 971.

There has been 1 death of a nurse child during the year while actually in charge of a foster mother. 27 children were admitted to hospital, 2 of whom died.

The majority of foster mothers in Manchester undertake the care of a child for 12s. 6d. per week. A few charge 15s., a small proportion 10s., and a very small number from 2s. to 10s. per week.

The finding of foster mothers still remains difficult and it is, therefore, recorded how homes were found for the 251 new children:—

Introduced by the infant life protection officer	65
Friends and acquaintances.. .. .	79
Children returned to late foster mothers.. .. .	46
Found by the parents—through advertising, neighbours, etc.	33
Children left with the matrons of nursing homes where born, until other arrangements made	7
Mother and child previously lived together; mother on obtaining work left child in care of landlady ..	4
Foster mother and child removed to Manchester from an outside area	6
Introduced by charitable organisations, etc.	3
Relation of parent	8
	<hr/> 251

The friends and acquaintances of parents seldom take a second child. This greatly reduces the supply of good foster mothers.

21 children who have attained the age of 9 years, have been visited by the infant life protection officer.

Seven children are not aware of their parentage. Four of these foster mothers would like to adopt the children legally and are not now receiving payment. The mothers however, cannot be traced.

Fourteen children are aware of their parentage, and know their own parents. Eleven foster mothers receive regular payment, and the children are remaining with them. Payments have ceased for the other 3 children, and the foster mothers intend to adopt them legally.

Municipal Foster Mothers.

In 1919 the Committee accepted the endowment of the Cheetham Institute for children deprived of the care of one or both of their parents, and in return undertook to provide foster mothers for such children as would have been supported by this endowment.

Since April, 1932, foster mothers have received 15s. weekly for each child, and for this amount they undertake to clothe, feed, and care for the child. It is also a condition that the foster children should be taken regularly to the infant welfare centre.

At the beginning of the year there were 13 foster mothers and 13 foster children on the register, and at the end of December, 1937, there were 9 foster mothers and 9 foster children. During the year 19 children have been helped by the municipal grant, and 6 children have actually been placed on the register.

The grant has been spent in maintaining children of ill mothers or of widowers, and 9 unmarried mothers who could not make any suitable arrangements for the care of their children. The period of help given to each child varies, but no child is helped after the age of 5 years. Usually, permanent suitable arrangements are made before the child attains the age of 5 years.

Adoptions.

During the year 1937, permanent homes were found for 14 foster children, 8 of whom were legally adopted by their foster parents, and 6 by other persons. 5 other children who were handed over to would-be adopters were introduced by various charitable agencies.

In addition, the Maternity and Child Welfare Department introduced 21 other infants to would-be adopters. Of this number 20 have been legally adopted; 1 was returned because the child would not settle. He was introduced to another adopter, and returned because the adopter changed her mind.

Introductions are not made until the prospective adopters have been interviewed and visited to ascertain their suitability. If the addresses are out of the Manchester area, an opinion is obtained from the Medical Officer of Health of the district concerned. During the year, 17 children have been introduced into homes outside the Manchester area, after satisfactory reports have been obtained. At the end of the year, a further report is requested from the Medical Officer of the district where each child resides, stating the condition of the child, and whether a legal adoption order has been obtained.

No introduction is made to a child unless the mother has previously asked for help in obtaining a suitable adopter. These mothers are never helped with adoption until they have first been advised to keep their children and other means of help have been suggested or offered, and refused.

Anxiety is felt about those children who are handed over to would-be adopters, either by the mothers or by one of the charitable agencies, without the knowledge of the department. Adoption of these children might be unsatisfactory, as the mother may disappear, and it not be possible for the would-be adopter to complete the legal adoption, or the adopter may be unsuitable and yet, as no money or gifts have been accepted, the department has no power under the Infant Life Protection provisions of the Public Health Act, to remove the child.

Compulsory notification to the Maternity and Child Welfare authorities of all children handed over for adoption, with the name and address of the parent responsible, would assist considerably in completing the legal adoption of these children.

NURSING HOMES REGISTRATION,

PUBLIC HEALTH ACT, 1936. SECTION 187-192.

There were 32 registered nursing homes in Manchester at the beginning of 1937. 9 were registered for maternity patients; 5 for medical patients; 10 for maternity, medical and surgical; 1 for maternity and surgical; 4 for maternity and medical; 1 for surgical and 2 for medical and surgical.

During 1937, no applications for registration of new homes were received, 6 applications were received for re-registration. 4 were re-registered owing to change of keeper and 2 owing to re-allocation of beds. 5 homes were given up; 1 owing to death of keeper; 1 removed; 1 ceased to take patients; 1 keeper became a municipal midwife; and 1 was compensated under the Midwives Act, 1936, owing to age. 53 visits were paid to homes already registered. 11 visits were also paid to 6 houses reported as being used as nursing homes. 5 did not come within the meaning of the Act and 1 case was referred to the Town Clerk and a cautionary letter was sent.

Total visits paid, 64.

EXEMPTION FROM REGISTRATION OF VOLUNTARY HOSPITALS.

During 1937, 15 applications were received for exemptions under Public Health Act, 1936, section 192, and all were granted.

SUMMARY OF WORK FOR THE YEAR 1937.

No. of applications for registration		Maternity	—
		Maternity and others	—
		Others	—
No. of homes registered..		Maternity	—
		Maternity and others	—
		Others	—
No. of homes discontinued.		Maternity	3
		Maternity and others	1
		Others	1
No. of orders made.....	Refusing	Maternity	—
		Maternity and others	—
		Others	—
	Cancelling	Maternity	—
		Maternity and others	—
		Others	—
No. of applications for exemption from registration		Maternity	—
		Maternity and others	2
		Others	13
No. of cases in which exemption has been—	Granted	Maternity	—
		Maternity and others	2
		Others	13
	Withdrawn.....	Maternity	—
		Maternity and others	—
		Others	—
	Refused.....	Maternity	—
		Maternity and others	—
		Others	—

WYTHENSHAW.

The census of 1931, the year in which the City boundaries were extended to include Wythenshawe, placed the population of the ward at 6,859.

During the ensuing years the development of the area as a Corporation Housing Estate has resulted in a steady growth of population, the figure at the end of 1937 being estimated to be 34,510.

In June, 1935, Beech House, Yew Tree Lane, Northenden, was bought by the Committee for a welfare centre, to serve the northern part of Wythenshawe. The centre was opened on September 23rd with two infant welfare sessions. The attendances increased rapidly, and at the end of 1937 there were, weekly, 6 infant and toddlers' sessions, 1 ante-natal session, 1 exercises class for mothers, 1 remedial exercises class for toddlers, 3 massage sessions, and 2 cookery sessions—one for demonstration and one for practical cooking, and in conjunction with these latter, 2 kindergarten classes for toddlers. For attendances, see page 316B.

The following table illustrates the increase in the number of children under five in Wythenshawe (1933-37):—

Year	Children Born in Wythenshawe	" Founds " (residing in Wythenshawe after removal from districts outside the Manchester Area)	Removals to Wythenshawe from other districts in Manchester	Removals from Wythenshawe	Deaths	Total
1933 ..	218	39	364	27	16	578
1934 ..	595	13	88	30	27	639
1935 ..	680	33	96	46	52	711
1936 ..	667	9	138	67	57	680
1937 ..	702	25	148	80	57	825
	2,892	119	834	250	209	3,433

At the end of 1937, four health visitors were employed full-time in Wythenshawe and a certain amount of health visiting has been undertaken by the Superintendent of Northenden Centre. During the year 13,443 visits were made in this area. (See general table of health visitors' work.)

The continued increase in the population of the southern parts of Wythenshawe is progressively stressing the need for a centre in that region. The Committee is actively looking for temporary premises pending the provision of the joint centre for maternity and child welfare work and a school clinic.

VISITS PAID BY THE MATERNITY AND OPHTHALMIC NURSES,
IN WYTHENSHAW, DURING 1937.

66 nursing visits to cases of puerperal fever, puerperal pyrexia, and raised temperature.

95 nursing visits to mothers with mastitis.

10 nursing visits to mothers with phlebitis.

9 nursing visits to puny non-thriving babies.

155 nursing visits to premature infants.

34 nursing visits to infants suffering from pemphigus and other skin conditions.

2 nursing visits to an infant with spina bifida.

20 nursing visits paid to cases of unsatisfactory umbilicus.

4 visits to cases of ophthalmia neonatorum.

2 investigations into maternal deaths.

21 investigations into cases of puerperal fever, puerperal pyrexia.

447 visits by ophthalmic nurses to cases of ophthalmia neonatorum and other eye conditions.

Total number of visits, 870.

WORK DONE BY THE HEALTH VISITORS.

The health visitors continue to supervise the health and welfare of mothers and children under school age in their own homes.

They also assist in the maternity and child welfare centres, and have duties in connection with the prevention and investigation of infectious diseases affecting young children, and the following-up of cases of scabies and verminous conditions notified by the Education Authority.

Staff.

The staff consists of a superintendent, two assistant superintendents (one of whom is part-time tutor from October to April each year to the students training as health visitors at the Municipal College of Technology), 61 health visitors, one full-time and two part-time cleansing nurses, and eight clerks. As in previous years, four students were appointed for a period of twelve months under the training scheme for health visitors arranged with the College of Technology. The first six months is devoted to training, and during the second six months the time of these student health visitors is given entirely to the department and is divided between the maternity and child welfare centres and health visiting.

Notification of Births Act.

The total number of notifications received under the Notification of Births Act was 12,810, of which 8,279 were from doctors, 4,524 from midwives and seven from parents. 12,227 notifications referred to live births and 583 to still-births.

In the preceding year 13,094 notifications were received.

The total registered births for the city during 1937 numbered 11,222, of which 10,754 were live births and 468 still-births.

It has been possible in 10,460 births—representing 97 per cent. of the total births of the city—to consider in detail the place in family of each birth, and this is shown in the following table :—

1937 Births arranged to show Place in Family.

Place in Family	Number of Pregnancies		1937 Per cent.	1936 Per cent.
	Legitimate	Illegitimate		
1st ..	3,595	261	36.90	36.7
2nd ..	2,658	60	26.00	25.32
3rd ..	1,443	36	14.14	13.62
4th ..	854	18	8.33	8.80
5th ..	519	23	5.18	5.23
6th ..	329	18	3.31	3.20
7th ..	222	8	2.20	2.62
8th ..	152	6	1.51	1.63
9th ..	90	4	.90	1.22
10th ..	72	2	.70	.68
11th ..	41	3	.42	.53
12th ..	22	1	.21	.17
13th ..	8	—	.07	.11
14th ..	5	—	.04	.10
15th ..	5	1	.05	.03
16th ..	2	—	.02	.03
17th ..	1	—	.01	.01
19th ..	1	—	.01	—
Total ..	10,019	441	100.00	100.00
	10,460			

The ages of the mothers at the time of the birth of 10,369 children in 1937 is shown below, distinction being made between legitimate and illegitimate births :—

AGE OF MOTHERS AT BIRTH OF CHILDREN DURING 1937.
Place in Family of each Birth. (Legitimate.)

AGE GROUPS			PLACE IN FAMILY																	TOTAL BIRTHS		
Years			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	19		
15—19			225	27	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1937 256	1936 21
20—24			1407	661	174	52	8	2	..	..	..	..	..	..	..	..	..	..	..	..	2,304	2,38
25—29			1284	1065	560	243	106	39	11	1	..	..	..	..	..	..	..	..	..	..	3,309	3,24
30—34			499	636	433	287	182	107	61	40	19	6	2	..	..	..	..	..	..	..	2,272	2,31
35—39			120	220	213	204	150	133	92	75	35	37	14	6	1	1	2	..	..	..	1,303	1,39
40—44			21	21	49	58	66	40	50	32	30	25	22	14	7	3	1	2	1	..	442	50
45—49 .. ..			..	3	4	4	2	4	7	4	6	4	2	2	..	1	2	..	..	1	46	3
			3560	2633	1433	848	514	325	221	152	90	72	40	22	8	5	5	2	1	1	9,932	10,10

Place in Family of each Birth. (Illegitimate.)

AGE GROUPS			PLACE IN FAMILY																	TOTAL BIRTHS		
Years			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	19		
15—19	..	..	50	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1937 51	1936 21
20—24	..	..	106	16	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	124	1
25—29	..	..	51	19	12	3	3	1	1	..	..	..	..	..	..	..	..	..	..	..	90	1
30—34	..	..	30	13	13	7	7	3	6	1	..	..	..	1	..	..	..	..	..	..	81	
35—39	..	..	16	8	8	6	6	9	1	4	3	..	2	..	..	..	..	..	..	..	63	
40—44	..	..	5	1	1	1	5	5	..	1	1	2	1	..	..	..	1	..	..	..	24	
45—49	..	..	..	1	1	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	4	
			258	59	36	18	23	18	8	6	4	2	3	1	..	..	1	..	..	..	437	4

The number of new live births allocated to the health visitors for visiting during the year was 10,772.

“ Found ” Children.

In addition, the health visitors also visted 1,166 other children for the first time. They belonged to families who removed into Manchester during the year. The year of their birth is given below :—

326	children	born	in	1937
311	„	„		1936
236	„	„		1935
192	„	„		1934
101	„	„		1933
<hr/>				
1,166				
<hr/>				

Deaths.

1,122 deaths occurred during the year amongst children under five years of age.

The age group classification of these deaths is :—

819 deaths of children under one year of age.			
155	„	„	1 to 2 years of age.
67	„	„	2 to 3 „ „
42	„	„	3 to 4 „ „
39	„	„	4 to 5 „ „

The sub-joined table shows the distribution according to age of deaths of children under one year :—

Died under 1 day	Died 1 to 7 days	Died 1 week to 4 weeks	Died 1 month to 3 months	Died 3 months to 6 months	Died 6 months to 9 months	Died 9 months to 12 months	Total
132	138	113	138	148	86	64	819

Table 3 (page 341), shows the classification of these deaths in wards and according to the principal causes of death. Tables 4 (page 342) and 5 (page 343) show a similar classification for the age groups 1 to 2 years and 2 to 5 years.

The following table, Table A, gives mortality rates for the past ten years amongst children aged one to five years, based upon the number of live births for the year.

The table demonstrates clearly (when compared with the epidemic records) the high peaks of mortality in the one to five year period during years of epidemic of severe type. The mortality rates for measles and whooping cough have also been included as making the survey more complete.

TABLE A.

YEAR	Infantile mortality rate	Mortality rate, 1-2 Group	Mortality rate, 2-5 Group	Mortality rate, 1-5 Group	Total Cases of Measles		Total known Cases of Whooping Cough	
					Cases	Mortality rate per cent.	† Cases	Mortality rate per cent.
1928 ..	91	27.7	18.1	44.2	7,141	1.72	3,189	2.79
1929 ..	97	29.6	21.8	53.6	9,512	.63	4,037	5.44
1930 ..	79	18.5	15.5	34.1	10,738	1.35	1,388	2.66
1931 ..	84	22.7	18.2	41.1	7,771	.83	3,150	2.73
1932 ..	85	22.1	20.3	42.5	12,238	.99	2,280	3.50
1933 ..	75	16.4	17.0	33.5	6,350	.75	2,230	2.11
1934 ..	69	14.8	18.2	32.1	11,383	.85	1,565	2.23
1935 ..	71	14.7	15.2	29.9	9,907	.98	1,632	2.81
1936 ..	77	15.5	12.8	28.3	8,807	1.37	1,457	3.22
1937 ..	76	14.3	13.7	28.0	6,550	.68	1,403	3.77

* Transferable deaths not included for these years.
† Not compulsorily notifiable, therefore these figures are only approximate.

Still-births.

The health visitors investigated 396 still-births occurring in the practice of doctors and midwives and in the various city hospitals.

Ante-natal Care.

During the period July 1st, 1936—June 30th, 1937, 482 still-births and 261 neo-natal deaths occurred in the City.

751 special visits were paid by the health visitors at the end of six months to homes in which these had occurred, with a view to ensuring adequate care for the mother, if she subsequently became pregnant. In this way 31 expectant mothers were brought to our notice, and these were revisited at intervals of one month, a total of 164 such visits being paid.

In addition, the health visitors made 2,990 visits to expectant mothers discovered in the course of routine home visits. Many of these also attended the ante-natal clinics held at the maternity and child welfare centres and at Withington and Crumpsall Hospitals.

Summer Diarrhoea.

From July 15th to September 30th, 104 cases of summer diarrhoea were visited. Of these, 14 occurred during the last two weeks in July, 45 during the month of August, and 45 during the month of September. These figures are slightly higher than those for the preceding year, when 77 cases were visited. Medical attention was obtained in 93 instances, and 50 children were treated in hospital.

The details and distribution of these cases are shown in Table B which immediately follows :—

TABLE B.

SUMMER DIARRHŒA. CASES VISITED BY THE HEALTH VISITORS IN 1937
(CHILDREN UNDER 5 YEARS) COMPARED WITH THOSE VISITED DURING
THE FOUR PRECEDING YEARS.

	Year				
	1933	1934	1935	1936	1937
Total number of cases visited	78	86	80	77	104
Number of cases occurring in—					
July (15th–31st)	21	38	22	23	14
August	27	33	32	28	45
September	30	15	26	26	45
<i>Cases in Wards.</i>					
Oxford .. .. .	..	..	..	..	1
All Saints	5	7	3	5	1
Ardwick	3	2	8	5	5
Beswick	3	1	2	2	..
Blackley	3	..	..	1	..
Bradford	3	..	2	1	7
Collegiate	2	1	..	2	..
Collyhurst	3	2	1	1	3
Cheetham	7	1	2	1	5
Crumpsall	1	1	1	..	..
Gorton North .. .. .	..	1	12	5	7
Gorton South	7	7	2	2	7
Harpurhey .. .. .	..	2	5	..	1
Levenshulme .. .. .	..	2	2	1	..
Longsight .. .. .	..	2	..	..	..
Medlock Street	4	8	4	..	4
Miles Platting	3	7	6	1	..
Moston .. .. .	..	2	..	2	2
Moss Side East	1	3	..	3	9
Moss Side West	3	..	2	..	7
New Cross	4	7	7	6	3
Newton Heath	3	7	2	1	1
Openshaw	1	3	1	..	2
Rusholme	7	2	5	11	2
St. Clement's .. .. .	..	..	..	..	..
St. George's	1	5	2	4	1
St. John's	1	1	1	..	1
St. Luke's	3	3	2	10	2
St. Mark's	2	1	3	7	5
St. Michael's	4	..	..	2	3
Withington, Didsbury, and Chorlton-cum-Hardy	1	5	1	3	6
Wythenshawe	3	3	4	1	18
Exchange .. .. .	..	..	..	..	1
Number affected under 1 year of age	38	57	42	40	53
Method of feeding at onset of illness—					
Breast	11	10	3	9	14
Mixed	9	9	15	6	7
Hand	18	38	24	25	32
Deaths—					
Total number	8	22	18	12	18
Number under 1 year of age	6	10	15	8	16
Number under 4 months of age	3	12	12	4	9

Co-operation with School Medical Officer.

Only three children were referred to the School Medical Officer for admission to the Residential School for Physically Defective Children, Didsbury. Severe deformity due to rickets is rarer today than it was a few years ago, but there are still a few parents who are indifferent to deformity in their children, and unwilling to carry out prolonged treatment. Such children are closely supervised by the health visitors (a) to ensure that medical treatment is obtained, either at the out-patient department of one of the hospitals in the city, or at a child welfare centre; and (b) to help the parents to recognise that such deformities can be largely remedied, and the future efficiency and happiness of the child correspondingly increased.

The help of the N.S.P.C.C. is asked when parents fail to obtain or follow-up the treatment ordered.

Circular 1550, "Children under School Age," issued in May, 1936, by the Ministry of Health to Maternity and Child Welfare Authorities throughout the country, drew attention to the "16 per cent. of children entering school who are found to require treatment for some disease or defect," and pointed out the necessity for "systematic periodical health visiting of those young children who are not in attendance at school."

During 1937 the health visitors' districts were reorganised in an attempt to reduce this incidence by ensuring that every child between two and five years of age was visited at least twice yearly, and in certain cases more frequently, to discover and follow-up conditions requiring medical supervision.

In markedly unsatisfactory cases a summary of the first five years of life is sent to the School Medical Officer on the child reaching school age.

These are divided roughly into five groups, namely :—

GROUP I.—*Special Histories.*

Children with congenital defects, or in whom serious illness, or other unsatisfactory physical conditions have been present.

GROUP II.—*Unsatisfactory Children.*

Children who at the completion of their fifth year have some definite unsatisfactory physical condition which it is suspected has not yet come to the notice of the school medical department.

GROUP III.

Children suffering from tuberculous affections, or query tuberculosis, or who belong to a family with a history of tuberculosis.

GROUP IV.

Children with a personal history of rheumatism, or chorea, or who belong to a family having a history of either.

GROUP V.

Children who though apparently healthy in themselves belong to a family with a record of ill-health.

Such summaries relating to 1,082 such children were sent to the School Medical Department during the year. The following up of children under 5 who attend nursery schools and classes, and are found at the routine medical inspection to be suffering from minor physical defects, is also undertaken by the health visitors. During the year 32 children were thus visited.

Assistance is also given by the health visitors to the doctors responsible for immunising children attending elementary schools in the City against diphtheria, and attendance was made for this purpose at 200 sessions during 1937.

ADMISSIONS TO HOSPITAL OF CHILDREN UNDER 5 YEARS OF AGE, AS RECOMMENDED FROM THE CHILD WELFARE CENTRES OF THE CITY.

The thirty beds retained by the Corporation at the Duchess of York Hospital for Babies—twenty cots for children under 1 year and ten beds for children 1 to 3 years—have all been fully occupied throughout the year.

Recommendations for these beds are received from the medical officers of the child welfare centres and arrangements are then made from this department for the admission to hospital of the children recommended.

Recommendations for the admission of children to Booth Hall Hospital have similarly been made and admission to hospital arranged.

The following table shows the number of children recommended for each hospital and the number who were actually admitted :—

Hospital	Number recommended	Number admitted
The Duchess of York Hospital for Babies	Cots	139
	Large beds	71
Booth Hall Hospital	118	105
Totals	328	283

Analysis of the reasons which prevented the admission of the 45 children recommended, but not admitted, is given below :—

	Children
Admitted to private cots	3
„ „ other hospitals	14
Improved whilst on waiting list	4
Parents' permission withheld	20
Removed from Manchester	2
Died before a vacancy occurred	1
Infection in the home	1
Total	45

The diagnosis made in the case of children under one year admitted to small cots in the Duchess of York Hospital and to Booth Hall Hospital, was as follows :—

	Duchess of York Hospital	Booth Hall Hospital
Dyspepsia	24	5
Marasmus	14	5
Malnutrition.. .. .	10	5
Gastro-enteritis	15	3
Bronchitis	9	4
Prematurity	9	—
Debility	7	—
Vomiting	5	—
Atrophy	6	1
Rickets	5	—
Pyloro-spasm	4	—
Cleft palate	2	—
Anæmia	2	—
Convulsions	1	—
Pneumonia	1	1
Congenital syphilis	1	—
Stomatitis	1	—
Peritonitis	1	—
Scabies	—	1
Impetigo	—	1
Dermatitis	—	1
For observation	—	1
	117	28

For children over one year admitted to large cots in the Duchess of York Hospital or to Booth Hall Hospital, the diagnosis was as follows :—

	Duchess of York Hospital	Booth Hall Hospital
Rickets	32	15
Malnutrition.. ..	6	3
Tonsils and adenoids.. ..	—	19
Debility	6	4
Tonsillitis	—	6
Bronchitis	3	6
Dyspepsia	2	1
Pneumonia	2	1
Impetigo	—	4
Atrophy	2	1
Spasmophilia	1	—
Gastro-enteritis	1	5
Anæmia	1	2
Dermatitis	—	2
Cervical adenitis	1	2
Mentally backward	—	2
Otorrhœa	—	2
Pulmonary fibrosis	1	—
Synovitis	1	—
Anterio-polio-myelitis	1	—
Catarrhal jaundice	—	1
Chronic constipation	—	1
Spastic paraplegia	1	—
	61	77

The ages of children on admission were :—

	Duchess of York Hospital	Booth Hall Hospital
Under 1 month	12	—
1— 3 months	49	10
3— 6 „	26	8
6— 9 „	11	8
9—12 „	15	2
1—2 years	*50	25
2—3 „	15	17
3—4 „	—	20
4—5 „	—	15
	178	105

* Four of these children, though over age, being greatly underweight and undersized, were admitted as urgent “cot” cases.

The average length of stay in the Duchess of York Hospital varied from 6 days to 20 weeks. The average was about 7 weeks.

The average length of stay in Booth Hall Hospital was 30·5 days.

Special Visits to Aged Persons under Section 34, Manchester Corporation (General Powers) Act, 1930.

The health visitors have paid 44 visits to elderly women referred to the Medical Officer of Health by general practitioners, relieving officers, and others, as suffering from serious infirmity and unable to provide themselves with proper care and attention. Seventeen such cases have been under supervision during 1937, arrangements being made for better care in each case.

MEASLES, GERMAN MEASLES, WHOOPING COUGH, AND PNEUMONIA.

Measles.

The investigation of cases of measles has been carried out without a break since 1916, and is directed towards securing good nursing for and the isolation of infective cases, preventing the spread of infection, and, more particularly, reducing the risk of infection amongst children under five years of age.

The 1935–36 epidemic resulted in one case of deafness and two cases of blindness, and in the epidemic which began in September, 1937, two children lost the sight of one eye. One was the result of an acute measles infection (see page 291, Ophthalmic Nurse's Report), and the other followed scarlet fever and german measles.

Measles chiefly affect children under five years of age, and the highest mortality is amongst children under three.

The subjoined table shows the number of cases of measles during the last four epidemics, with a comparison of the deaths of children under and over five years of age.

MEASLES—YEARS 1929 TO 1937 (INCLUSIVE).

	YEAR	Known Cases	Over 5 years	Children under 5 years	DEATHS					Total under 5 years	Total Measles Deaths	
					Under 1 year	1 year	2 years	3 years	4 years			
1	1929	9,512	3,453	6,059	18	28	4	6	2	58	60	} 30 in 4th quarter 111 in 1st quarter
	1930	10,738	3,592	7,146	39	61	20	13	6	139	146	
2	1931	7,771	3,077	4,694	11	28	11	8	2	60	65	} 50 in 4th quarter 89 in 1st quarter
	1932	12,238	4,742	7,496	26	55	14	11	5	111	122	
3	1933	6,350	2,143	4,207	7	23	4	4	5	43	48	} 39 in 4th quarter 88 in 1st quarter
	1934	11,383	4,065	7,318	18	40	12	7	11	88	97	
4	1935	9,907	3,387	6,620	16	51	7	10	11	95	98	} 90 in 4th quarter 104 in 1st quarter
	1936	8,807	3,236	5,571	37	46	13	7	5	108	121	
5	1937	6,550	2,507	4,043	9	16	6	4	5	40	45	37 in 4th quarter

First cases of measles and german measles in a household are notifiable, and the majority of notifications are received from medical practitioners. A number, however, are reported by the education authority, and subsequent cases are either discovered by the health visitor or are notified by the parents on a postcard left for the purpose by the health visitor at her previous visit.

When a doctor is already in attendance, the health visitor is responsible only for ascertaining the source of infection, ensuring the isolation of the case, arranging school exemption, and advising the domiciliary disinfection which should be carried out. Frequently, however, mothers appeal to the health visitor for assistance in carrying out the doctor's instructions as to the nursing of the patient, and the hygiene of the sick room. This applies particularly to the poorer closely populated districts of the city where the disease spreads rapidly, and where facilities and materials for adequate home nursing are difficult to secure.

As primary cases only are notifiable, the health visitor, in her supervision of contacts, is often the means of discovering other children who have developed the disease. Many parents are reluctant to summon a doctor for a subsequent case, though these are usually pre-school children in whom the risks are greater than in older children, and for whom early medical supervision is all important. It is sometimes difficult, too, for parents to recognise signs that the disease is taking an abnormal course, and the health visitor's visits are valuable in securing the recall of the doctor in time to prevent complications becoming serious.

The Public Health Committee has an arrangement with the Manchester and Salford District Nursing Association for the nursing at home, where necessary, of children suffering from measles and its complications. The Association is making every effort through its affiliated associations to extend the use made of the district nurses' services in the City.

Accommodation is provided in Monsall and Booth Hall Hospitals for the reception of cases where the home conditions are unfavourable.

A grant, originally made in 1917, to obtain milk for young children suffering from measles in families where the income is below the standard scale, is made after the circumstances have been investigated by the health visitor. Particulars of this will be found on page 336.

The amount of work involved in the control of measles and whooping cough can be seen in the tables given below. Its importance is emphasised by the fact that these two infections of childhood cause more deaths and incapacitation than all the other infectious diseases.

Notification and Number of Cases of Measles.

	(1937)
Cases notified by doctors	5,388
Cases found by health visitors or notified by other than doctors	1,162
Total number of known cases	6,550
Total number of cases investigated	6,550

This is a decrease of 2,257 over the previous year.

In addition 128 (in 1937) un-notified cases were found after complete recovery had been made and are classified as "late" cases.

The subjoined table shows the incidence of pneumonia and their distribution according to home cases or hospital cases :—

	Nursed at home		Removed to hospitals		* Developed Measles whilst in hospitals		Totals (1937)
	6,215		287		48		
	Not having Pneumonia	Com- plicated by Pneumonia	Not having Pneumonia	Com- plicated by Pneumonia	Not having Pneumonia	Com- plicated by Pneumonia	
Number of cases ..	6,114	101	199	88	45	3	6,550
Recovered ..	6,111	73	193	65	44	1	6,487
died	3	28	6	23	1	2	63
Case fatality.	·049%	27·72%	3·01%	26·13%	2·22%	66·6%	·96%

* Patients in hospital for other conditions developing measles.

The cases removed to hospital are as a rule of a more serious type This accounts for the somewhat higher mortality rates in that group.

The total visits paid to measles cases was 11,260.

German Measles.

Total number of German measles cases notified	824
" " " " visited	824
" " " " recovered	822
" " " " died	2

The number of visits paid by the health visitors in respect of German measles was 1,659

Whooping Cough.

Whooping cough is not compulsorily notifiable, but parents and guardians of school children are required to notify the head teacher of any child known or suspected to be suffering from the disease. In addition to the notifications thus received from the Education Department a considerable number of cases are discovered in the course of home-visiting, but this total by no means represents the actual number, as many cases escape our notice.

The home visitation of children suffering from whooping cough follows the same lines as that of measles. The number of cases notified was 1,403, all of which were visited.

In addition, 1,044 cases of whooping cough were found after complete recovery had been made, and have been classified as "late" cases.

The sub-joined table shows the incidence of pneumonia and their distribution according to home cases or hospital cases :—

	Nursed at home		Removed to hospitals		* Developed Whooping Cough whilst in hospitals		Totals
	1,223		167		13		
	Not having Pneumonia	Com-plicated by Pneumonia	Not having Pneumonia	Com-plicated by Pneumonia	Not having Pneumonia	Com-plicated by Pneumonia	
Number of cases ..	1,175	48	94	73	11	2	1,403
Recovered ..	1,160	34	92	39	10	1	1,336
Died	15	14	2	34	1	1	67
Case fatality.	1.27%	29.16%	2.12%	46.57%	9.09%	50%	4.77%

* Patients in hospital for other conditions developing whooping cough.

The total number of visits paid to whooping cough cases was 3,102.

INFLUENZA AND PNEUMONIA.

Influenza is not notifiable, but all cases which come to the notice of the health visitors, either in the course of their own enquiries or through the death returns, are investigated. The resultant figures, however, are of little value in comparing the incidence of influenza in various parts of the city, for the term is rather loosely applied to a chill or slight indisposition, though enquiry is always made as to whether a doctor had been in attendance.

Although acute primary pneumonia is notifiable, approximately 15 per cent. of the total number of known cases are not notified, but are revealed through the death returns. It is recognised that diagnosis is sometimes difficult, but in a considerable number of cases nursing help and additional nourishment could be provided if notification of the illness were received earlier.

The figures relating to the investigation of influenza and pneumonia are given on pages 344 to 347.

Assistance.

The grant (originally made in 1917) to supply milk to young children suffering from measles, whooping cough, and pneumonia in families where the actual income is below the standard scale, was continued during the year. Applications for milk were granted in 934 cases, and 13,166 pints of milk were given.

The general statistics relating to measles, German measles, and whooping cough are found on pages 46 to 49.

WORK AT MONSALL DISINFECTING STATION.

Vermin.

As in previous years the Education Department was the main source of notification of verminous cases, and 389 notifications were received as compared with 402 in the preceding year, 450 in 1935, and 656 in 1934.

The treatment of verminous persons and notified cases of scabies is carried out at Monsall Disinfecting Station. During the year the Station was in use for the compulsory cleansing of 55 school children and of 75 persons who presented themselves voluntarily for treatment.

The special comb used at the Cleansing Station was made available to the mothers of verminous children at a reduced price, and during the year 66 combs were thus distributed.

Formerly all school children requiring compulsory cleansing were referred to this department and they were cleansed by the special nurse appointed for the purpose. These cleansings are now mostly carried out as voluntary cleansings by the school nurses at various centres in the city, and only six cases were brought to the Court for prosecution during the year.

The nurse paid 70 visits to verminous cases in addition to the 817 visits made by the health visitors.

Scabies.

Our main source of information is the Education Department, which sent 754 notifications of scabies in school children during 1937 as compared with 705 in 1936. Adults and children under 5 years of age are normally treated at Monsall Cleansing Station. The children of school age are treated at the school clinics. If the parents so desire, children of both age-groups may be treated in the school clinic or at the cleansing station—whichever is more convenient.

Many additional cases were brought to our notice either as contacts of those notified by the school medical officer or as new cases. The source of these notifications is shown as follows :—

Booth Hall Hospital	Private Medical Practitioners	Centre Medical Officers	Health Visitors	Discovered during Disinfestation or sent by former Patients	Total
23	27	7	93	45	195

The average number of treatments per person is three, and altogether 1,923 treatments were given as compared with 1,322 in 1936, and 753 in 1935. This number was made up as follows :—

Males (adult)	..	..	..	..	..	405 treatments.
Females (adult)	..	..	..	..	774	„
School children	..	..	..	..	234	„
Children under 5	..	..	..	..	510	„

Evidence of the usefulness of the work is found in the number of individual requests for treatment made to the department during the year, including those from medical practitioners in respect of families having several members affected. The disinfection of the bedding is stipulated for in every case before arrangements for treatment are completed, and the personal clothing is disinfected each time the patient attends for treatment.

Disinfestation of Persons removed under Slum Clearance Scheme.

This work has increased since it was transferred from Clayton Hospital to Monsall Disinfecting Station on July 30th, 1935. The following table shows the number of persons treated during the year 1937. Further reference to this work is contained on page 267.

Males		Females		School Children		Infants		Total	
1936	1937	1936	1937	1936	1937	1936	1937	1936	1937
280	420	297	429	240	311	184	249	1,001	1,409

The increase in the amount of work undertaken by the special nurse at Monsall Disinfecting Station necessitated the appointment on the 12th of July, 1937 of a part-time assistant for four sessions weekly, in addition to that made in July, 1936, for six sessions weekly. These two part-time special nurses were required for 488 sessions, a number of these being evening sessions to suit the convenience of workers.

N.S.P.C.C.

The Section is again indebted to this Society for very valuable help. During the year 24 cases were referred for various reasons. The help given by the Society is gratefully acknowledged.

Jewish Ladies' Visiting Association.

This Association employs a trained nurse who is also a qualified health visitor for charitable work amongst the Jews in the Red Bank and Strangeways Wards of the City, and part of her time is given to maternity and child welfare work. This part is carried out under the general supervision of the Public Health Department, and whilst mainly devoted to the care of mothers, and children under 5, included 364 house-to-house inspections for the Association which are not directly connected with the work of this department. Details of her public health work are shown in the following table :—

TABLE I—HEALTH VISITORS' YEARLY SUMMARY— FIFTY-TWO WEEKS ENDING 1st JANUARY, 1938.

DISTRICT	No. of Births	INFANT WORK						ANTE-NATAL CARE						OVERCROWDING AND SANITARY DEFECTS						SCABIES		VERMINOUS WORK		MEASLES WORK				WHOOPING COUGH		PNEUMONIA		INFLUENZA		MISCELLANEOUS VISITS										No. of Sessions at Centre	TOTAL VISITS	REMARKS																																																																																																																																																																																																																																																																																			
		Primary Visits	Subsequent Visits	Children 1 to 2 years	Children 2 to 3 years	Children 3 to 4 years	Children 4 to 5 years	Investigations re Deaths of Children under 5 years from Diphtheria	Still Births		"Neo-Natal" Deaths		Expectant Mothers		Overcrowdings	Overcrowding Abated	Defects Found	Defects Remedied	Special Visits to either	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Visits re Infantile Diarrhoea	Visits re Relief	Aged and Infirm	Wrong Addresses	Infants	Infectious Diseases	Special Visits	Removals	Children not seen	D. I. Cl.	Nurse Children over 5																																																																																																																																																																																																																																																																																									
									Primary Visits	Subsequent Visits	Primary Visits	Revisits	Primary Visits	Subsequent Visits																											Overcrowdings	Overcrowding Abated	Defects Found				Defects Remedied	Special Visits to either	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits



District	Infant Work			ANTE-NATAL CARE						Vermineous		Scabies		Infectious Diseases		Sanitary Defects			Total Number Visits											
				Stillbirths		Neo-Natal Deaths		Expectant Mothers																						
Red Bank and Strangeways	Infants Under 1 year	Subsequent Visits	Children 1 to 5 years	Primary		Subsequent		Primary		Subsequent	Primary	Subsequent	Primary	Subsequent	Primary	Subsequent	Found	Remedied	Special Visits to either	3	5,780									
				Ex.	Non-Ex.	Ex.	Non-Ex.	Ex.	Non-Ex.																					
	188	1242	3,729	4	4	3	8	10	65	64	8	33	19	60	87	247	567	43	—											

In addition, the Jewish Health Visitor made 46 attendances at a Child Welfare Centre during 1937.

TABLE 2—SHOWING THE WORK DONE BY THE HEALTH VISITORS IN 1937
AND THE FOUR PRECEDING YEARS.

Classification of visits	1933	1934	1935	1936	1937
Primary visits to infants	11,517	11,880	11,692	11,983	11,593
Subsequent visits to infants under 1 year	52,351	49,104	42,646	44,940	43,535
Subsequent visits to children 1—5 years	131,691	131,142	112,865	120,601	113,352
Other visits <i>re</i> infants and young children	70	1,777	19,631	21,721	22,788
Still-birth investigations	471	475	455	470	396
„ Subsequent visits ... ..	...	...	372	327	379
Neo-natal—Subsequent visits ... ..	...	...	246	204	208
Visits to expectant mothers	3,154	2,975	3,358	2,970	3,154
Measles—Primary visits	5,963	11,572	9,531	8,904	6,067
„ Subsequent visits	6,171	19,631	8,746	15,445	5,193
German measles—Primary visits	296	389	1,114	820	763
„ Subsequent visits	390	355	1,398	895	896
Whooping Cough—Primary visits	2,164	1,509	1,542	1,398	1,263
„ Subsequent visits	3,631	2,439	2,300	2,133	1,840
Pneumonia—Primary visits	3,041	2,089	2,507	2,277	2,348
„ Subsequent visits	3,760	2,639	2,679	2,532	2,487
Influenza—Primary visits	1,594	118	337	120	782
„ Subsequent visits	1,257	91	227	66	406
Verminous cases—Primary visits	353	522	355	376	323
„ Subsequent visits	859	1,177	693	678	494
Scabies cases—Primary visits	365	372	347	435	557
„ Subsequent visits	756	688	602	782	959
Visits <i>re</i> sanitary defects	114	84	112	83	72
Visits <i>re</i> relief	24	16	37	22	19
Special investigations and visits to aged and infirm persons	25	45	140	153	917
Unsuccessful visits	1,883	2,124	1,343	571	559
Total visits	239,100	243,213	224,657	240,906	221,350
Number of health visitors	60	60	60	61	61
Number of districts worked	56	56	60	60	60
Attendances at child welfare centres	4,793	5,180	5,256	5,692	6,041
Attendances at Diphtheria Immunisation Clinics ... ..	...	189	228	144	197

WARD	Number of health visitors working in the district	Number of deaths of children under 1 year of age	Bronchitis and Pneumonia	Prematurity	Debility and Marasmus	Dystocia	Enteritis	Convulsions	Tuberculosis	Syphilis	Accidental Deaths, including Want of Attention at Birth	Influenza	Measles	Whooping Cough	Other Causes	Scarlet Fever	Diphtheria
All Saints	2	39	10	12	..	..	3	2	..	1	1	..	..	..	10	..	..
Ardwick ..	1	32	7	9	1	..	6	1	1	..	..	..	..	..	6	..	1
Beswick ..	2	31	9	10	1	..	2	..	..	..	..	1	..	..	8	..	..
Blackley ..	2	20	6	5	..	..	2	..	..	..	..	..	..	..	7	..	..
Bradford ..	2	34	8	14	..	..	4	2	..	..	1	..	..	..	5	..	..
Cheetham ..	2	20	3	4	1	1	2	2	..	..	..	..	..	1	5	..	..
Chorlton-cum-Hardy	2	22	3	3	1	1	2	1	..	..	1	..	..	..	10	..	..
*Collegiate ..	1	28	7	4	2	..	2	2	..	..	1	..	2	2	6	..	..
Collyhurst ..	1	18	1	5	1	..	3	1	..	..	..	..	1	..	5	..	1
Crumpsall ..	2	17	3	2	1	..	2	3	..	..	..	..	..	..	6	..	..
Didsbury ..	2	10	2	2	..	..	..	..	..	..	..	..	..	..	6	..	..
Gorton North	2	26	8	6	..	..	1	..	..	..	1	..	..	1	7	..	..
Gorton South	2	30	7	9	..	..	3	1	..	1	..	..	..	1	8	..	..
Harpurhey ..	2	30	6	12	1	..	2	..	..	..	..	..	1	..	8	..	..
Levenshulme ..	1	12	3	2	..	..	1	1	..	..	..	..	..	1	4	..	..
Longsight ..	1	12	3	4	..	..	1	..	..	..	..	..	..	..	4	..	..
Medlock Street	2	31	4	9	..	..	1	2	..	..	1	..	3	..	4	..	..
Miles Platting	2	34	8	5	..	..	4	3	1	..	..	..	..	3	11	1	..
Moston ..	2	22	4	5	..	2	1	..	..	..	..	..	..	1	9	..	..
Moss Side East	1	25	3	8	1	1	2	2	..	1	..	..	1	..	6	..	..
Moss Side West	1	24	2	9	1	..	3	1	..	..	..	..	1	2	5	..	..
New Cross ..	3	32	8	10	1	1	5	..	1	1	..	..	..	..	4	..	1
Newton Heath	2	15	2	3	..	..	1	1	..	..	..	1	..	1	6	..	..
Openshaw ..	1	26	7	6	1	1	1	..	..	..	..	..	..	1	9	..	..
Rusholme ..	1	12	1	6	..	..	..	..	..	..	..	..	..	..	5	..	..
†St. Clement's ..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
St. George's ..	2	37	7	5	3	..	..	2	..	2	4	1	1	4	8	..	..
St. John's ..	1	8	1	1	..	..	1	2	..	..	1	..	..	1	1	..	..
St. Luke's ..	2	40	7	11	1	2	6	2	..	..	..	..	1	1	9	..	..
St. Mark's ..	2	33	8	12	..	..	..	..	1	..	..	..	..	2	10	..	..
St. Michael's ..	2	24	9	4	..	..	3	..	..	..	..	2	..	..	6	..	..
Withington ..	3	17	1	4	..	..	2	..	..	..	..	..	..	..	10	..	..
Wythenshawe ..	5	57	4	13	..	..	6	2	2	..	..	1	..	3	26	..	..
Total ..	59	819	163	214	19	10	72	33	6	6	10	7	11	25	239	1	3

* A portion of Collegiate is worked by the Health Visitor appointed to visit the Jewish Poor.

† St. Clement's is worked by H.V. for New Cross. Two relief H.V.'s.

CAUSES OF DEATH—CHILDREN ONE TO TWO YEARS

WARD	Number of health visitors working in the district	Number of deaths among children 1 to 2 years of age	Bronchitis and Pneumonia	Debility and Marasmus	Enteritis	Convulsions	Tuberculosis	Syphilis	Accidental Deaths	Influenza	Measles	Whooping Cough	Other Causes	Scarlet Fever	Diphtheria
All Saints ..	2	6	4	..	..	..	1	..	..	..	1	..	..	..	..
Ardwick ..	1	9	4	..	..	..	..	..	..	..	2	1	1	..	1
Beswick ..	2	4	2	..	..	..	1	..	..	..	..	1	..	..	..
Blackley ..	2	2	1	..	..	..	1	..	..	1	..	..	..	..	..
Bradford ..	2	7	3	..	..	..	1	..	1	..	2	..	..	..	..
Cheetham ..	2	2	..	..	..	..	..	..	1	..	..	1	..	..	..
Chorlton-cum-Hardy ..	2	1	1	..	..	..	..	..	..	..	..	1	1	..	..
*Collegiate ..	1	8	4	..	1	..	..	..	..	..	1	1	1	..	..
Collyhurst ..	1	9	4	..	..	..	2	..	2	..	1	2	..	..	..
Crumpsall ..	2	4	1	..	..	..	1	..	..	..	..	..	..	..	..
Didsbury ..	2	3	2	..	..	1	..	..	..	..	..	..	..	..	..
Gorton North ..	2	1	..	..	..	..	..	..	..	1	..	2	..	..	..
Gorton South ..	2	3	..	..	..	..	..	..	..	..	..	..	1	..	..
Harpurhey ..	2	5	1	..	1	..	..	..	..	..	..	..	3	..	..
Levenshulme ..	1	3	1	..	1	..	..	..	..	..	..	..	1	..	..
Longsight ..	1	3	3	..	..	..	..	..	..	..	..	1	..	..	1
Medlock ..	2	10	6	..	..	..	1	..	..	..	..	..	2	..	..
Miles Platting ..	2	3	..	..	..	..	..	..	..	..	1	..	1	..	..
Moston ..	2	7	2	..	1	..	..	..	..	..	..	2	2	..	..
Moss Side East ..	1	2	..	..	..	..	2	..	..	..	..	..	..	..	..
Moss Side West ..	1	2	2	..	..	..	..	..	..	..	..	..	..	..	..
New Cross ..	3	9	3	..	1	..	3	..	..	..	..	..	1	..	..
Newton Heath ..	2	4	2	..	..	..	1	..	..	1	..	..	1	..	..
Openshaw ..	1	3	..	..	..	..	..	..	..	..	2	..	..	..	..
Rusholme ..	1	1	1	..	..	..	..	..	..	..	..	..	..	..	..
†St. Clement's ..	..	3	1	..	..	1	1	..	..	..	1	2	1	..	1
St. George's ..	2	13	3	..	..	..	1	..	..	..	4	..	1	..	..
St. John's ..	1	..	..	..	2	..	..	..	..	..	..	..	1	..	..
St. Luke's ..	2	5	2	..	..	..	1	..	..	..	..	..	..	..	..
St. Mark's ..	2	4	3	..	..	..	1	..	..	..	..	..	2	..	..
St. Michael's ..	2	9	5	..	..	..	1	..	..	..	..	1	1	..	..
Withington ..	3	7	3	..	..	..	1	..	..	..	1	1	..	..	..
Wythenshawe ..	5	3	2	..	..	..	1	..	..	..	..	..	..	..	..
	..	..	66	..	7	3	18	..	4	3	16	15	20	..	3

† St. Clement's is worked by H.V. and NEW CROSS

CAUSES OF DEATH—CHILDREN TWO TO FIVE YEARS

WARD	Number of health visitors working in the district	Number of deaths among children 2 to 5 years of age	Bronchitis and Pneumonia	Debility and Marasmus	Enteritis	Convulsions	Tuberculosis	Syphilis	Accidental Deaths	Influenza	Measles	Whooping Cough	Other Causes	Scarlet Fever	Diphtheria
All Saints ..	2	3	1	..	..	..	..	..	..	..	1	..	..	..	1
Ardwick ..	1	4	..	..	..	..	1	..	..	..	2	..	..	..	1
Beswick ..	2	7	2	..	..	..	..	..	..	..	1	1	..	..	1
Blackley ..	2	3	..	..	..	..	..	..	..	..	..	..	3	..	..
Bradford ..	2	5	..	..	..	..	3	..	..	..	..	2	1	..	..
Cheetham ..	2	1	..	..	..	..	..	..	..	..	..	..	1	..	1
Chorlton-cum-Hardy ..	2	6	1	..	..	..	1	..	..	..	..	1	1	..	..
*Collegiate ..	1	1	..	..	..	..	..	..	..	..	..	..	1	..	..
Collyhurst ..	1	3	..	..	..	..	..	..	1	..	..	1	1	..	..
Crumpsall ..	2	6	1	..	..	..	1	..	..	..	..	2	1	..	..
Didsbury ..	2	7	2	..	..	..	2	..	1	..	..	1	..	..	..
Gorton North ..	2	3	2	..	..	..	..	..	..	..	..	..	..	..	2
Gorton South ..	2	9	3	..	..	..	..	..	2	..	..	..	2	..	2
Harpurhey ..	2	3	..	..	..	..	..	..	1	..	..	..	2	..	..
Levenshulme ..	1	2	..	..	..	..	..	..	1	..	..	..	1	..	..
Longsight ..	1	2	1	..	..	..	..	..	..	..	..	..	..	1	..
Medlock Street ..	2	11	1	..	..	..	1	..	3	..	1	1	2	..	2
Miles Platting ..	2	3	2	..	..	..	..	..	1	..	..	..	..	..	..
Moston ..	2	2	1	..	..	..	..	..	..	..	..	..	1	..	..
Moss Side East ..	1	3	..	..	..	..	..	..	..	..	1	..	1	..	1
Moss Side West ..	1	4	..	..	..	..	1	..	..	..	..	..	1	..	1
New Cross ..	3	9	2	..	..	..	..	..	..	..	2	..	..	..	5
Newton Heath ..	2	4	..	..	..	..	..	..	1	..	2	..	1	..	..
Openshaw ..	1	1	..	..	..	..	..	..	..	..	1	..	..	..	..
Rusholme ..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	1
†St. Clement's ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
St. George's ..	2	5	3	..	..	..	..	..	..	..	2	..	..	..	..
St. John's ..	1	3	1	..	..	..	..	..	..	..	..	2	..	..	..
St. Luke's ..	2	9	2	..	..	..	..	..	..	..	..	1	4	..	3
St. Mark's ..	2	7	2	..	..	..	..	..	3	..	..	1	..	..	1
St. Michael's ..	2	7	3	..	..	..	..	..	1	..	1	..	1	..	..
Withington ..	3	4	1	..	1	..	..	..	..	..	1	..	..	..	1
Wythenshawe ..	5	10	3	..	..	1	1	..	..	..	..	..	3	1	1
Total ..	59	148	34	..	1	1	11	..	15	..	15	13	31	2	25

* A portion of Collegiate is worked by the Health Visitor appointed to visit the Jewish Poor.
† St. Clement's is worked by the H.V. for New Cross.
Two H.V.'s on relief duty.

INFLUENZA.

857 cases came to the notice of the department by various channels throughout the year and 846 cases occurring in 569 homes were investigated.

This was an increase over the number for 1936, when 136 were discovered. The health visitors paid 1,188 visits.

The distribution according to sex of the 846 cases of influenza investigated was as follows :—

	<i>Males.</i>	<i>Females.</i>	<i>Totals.</i>
Cases	384	462	846
Deaths	52	74	126

Sex and Age Groups (Investigated Cases).

	<i>Males.</i>	<i>Females.</i>
Under 1 year	13	7
1 to 4 years	85	83
5 „ 9 „	38	46
10 „ 14 „	24	25
15 „ 19 „	14	16
20 „ 24 „	13	22
25 „ 34 „	78	112
35 „ 44 „	53	59
45 „ 54 „	28	25
55 „ 64 „	17	23
65 „ 74 „	15	24
75 +	6	20
Totals	384	462

INFLUENZAL PNEUMONIA.

In addition to the above figures, 413 cases of influenzal pneumonia were notified and 45 discovered through the death returns; thus the total known cases of influenza for the year was 1,315 as compared with 376 in 1936.

Investigated Cases.

The distribution, according to sex, in the investigated cases of influenzal pneumonia, is therefore :—

	<i>Males.</i>	<i>Females.</i>	<i>Total.</i>
Cases	259	189	448
Deaths	96	80	176

The case-fatality rate was 39·2 per cent. (37·06 per cent. for males and 42·03 per cent. for females).

INFLUENZAL PNEUMONIA—SEX AND AGE GROUPS (Investigated Cases).

Age Group.	Males.	Females.
Under 1 year	9	9
1 to 4 years	14	15
5 „ 9 „	9	5
10 „ 14 „	7	3
15 „ 19 „	14	10
20 „ 24 „	17	14
25 „ 34 „	28	17
35 „ 44 „	50	18
45 „ 54 „	29	23
55 „ 64 „	52	28
65 „ 74 „	24	29
75 +	6	18
Totals	<u>259</u>	<u>189</u>

PNEUMONIA.

During 1937 the following notifications of pneumonia were received :—

Primary pneumonia	{ Lobar	1,097	
	{ Lobular	627	
	{ Unclassified	6	
		<u>1,730</u>	
Influenzal pneumonia	.. .. .		413
Secondary pneumonia	.. .. .		<u>136</u>
Total	.. .. .		2,279

The total for the preceding year was 2,064.

In addition to the above, however, 299 deaths from pneumonia—254 primary and 45 influenzal—all being un-notified cases—were brought to our notice through the death returns: thus the total number of known pneumonia cases for the year was 2,581, as compared with 2,350 for the previous year.

PRIMARY PNEUMONIA.

Of the 1,984 known cases of primary pneumonia, 1,158 were classified as lobar pneumonia, 812 as lobular pneumonia, and 14 simply as pneumonia. The number of cases which were investigated was 1,893, and of these the case-fatality was 29·4 per cent. for lobar pneumonia, and 45·8 per cent. for lobular pneumonia, as compared with 30·1 per cent. for lobar pneumonia and 52·8 per cent. for lobular pneumonia in 1936.

SECONDARY PNEUMONIA.

Secondary pneumonia is not notifiable, but the attention of the department has been directed to 139 cases during the year. Of these all were investigated and were associated with the following diseases :—

Measles	74
German measles	1
Whooping cough	53
Chickenpox and whooping cough	1
Measles and whooping cough	2
Chickenpox	2
Enteritis	1
Diphtheria	1
Following still-birth	1
Nephritis	1
Meningitis	2
	<hr/>
	139
	<hr/>

The case-fatality rate was 27·3 per cent., a decrease on the rate for the previous year, when it was 37·2 per cent. With 15 exceptions the patients were all children under 5 years of age.

A table showing the number of known cases of pneumonia, together with the number investigated, is attached.

In connection with all forms of pneumonia the health visitors paid 4,835 visits.

Investigation was attempted in each case, but in 101 instances it was difficult to obtain any definite information. These cases were, therefore, written off as “uninvestigated.”

1,406 cases were transferred to hospital, and of those nursed at home 264 were attended by a nurse supplied by the District Nursing Association, of whom 7 were referred from this section.

Assistance in the form of milk was allowed in 104 necessitous cases, the total amount of milk granted being 1,446 pints.

TABLE SHOWING THE NUMBER OF PRIMARY, INFLUENZAL, AND SECONDARY PNEUMONIA CASES WHICH HAVE COME TO THE KNOWLEDGE OF THE PUBLIC HEALTH DEPARTMENT DURING 1937.

THE TABLE ALSO SHOWS THE NUMBER OF NOTIFIED CASES, THE NUMBER OF CASES FULLY INVESTIGATED, AND THE TOTAL NUMBER OF KNOWN CASES.

	Known Cases	Cases fully investigated	Cases not fully investigated	Total known Cases of Primary, Influenzal, and Secondary Pneumonia occurring in 1937
(a) <i>Primary Pneumonia</i> —				
Notified Cases	1,730	1,659	71	Primary 1,984
Unnotified Cases (from Death Returns)	254	234	20	
(b) <i>Influenzal Pneumonia</i> —				
Notified Cases	413	408	5	Influenzal 458
Unnotified Cases (from Death Returns)	45	40	5	
(c) <i>Secondary Pneumonia</i> —				
Notified Cases	136	136	0	Secondary 139
Unnotified Cases (from Death Returns).. .. .	3	3	0	
Totals	2,581	2,480	101	

THE VENEREAL DISEASES SCHEME.

This scheme, which was initiated in 1916, has from time to time been developed, and under it a large volume of useful work is being done.

There are in the City six main centres, situated respectively at the Manchester Royal Infirmary, St. Luke's Hospital, Ancoats Hospital, St. Mary's Hospital for Women and Children, Manchester and Salford Hospital for Skin Diseases, and the Manchester Royal Eye Hospital.

Clinics are also held weekly at two of the Maternity and Child Welfare Centres and there is an auxiliary centre in the grounds of Monsall Hospital for the intermediate treatment of women who are referred there from the hospitals, or by their own doctor. There are also two venereal disease wards in Crumpsall Hospital which are linked to although not strictly within the scheme, and afford useful accommodation for in-patient treatment.

The extent and nature of the work done is shown in the tables at the end of this statement. It will be seen that during the year 695 persons suffering from syphilis and 1,373 from gonorrhœa presented themselves for treatment for the first time.

Of the 695 persons suffering from syphilis who are recorded as having attended for the first time, 82 were congenital cases, of which 46 were under treatment at the Royal Eye Hospital. Of 613 acquired cases 139 (23 per cent.) were in the primary stage; 137 (23 per cent.) in the secondary, and 337 (54 per cent.) in the later stages. These figures are not altogether satisfactory but at the same time the fact that 1,409 persons attended who, on examination, were found not to be suffering from venereal disease, indicates a general desire for early diagnosis and treatment on the part of persons who possibly have exposed themselves to infection.

As regards gonorrhœa, 1,130 males and 243 females attended for the first time. These figures compare with 994 and 248 respectively in the previous year. It is satisfactory to note that the number of attendances made by gonorrhœal patients continues to increase.

Although the venereal disease wards at Crumpsall Hospital and the treatment of venereal disease in young children at Booth Hall Hospital are not formally part of the venereal diseases scheme of the city, they are so in practice. The physician in charge at Crumpsall and Booth Hall is also in supervisory charge of the venereal disease work at the maternity and child welfare centres. There is thus close co-operation

between these centres and the hospitals mentioned so that women and children have their treatment secured in continuity in so far as that is practicable. In particular there should be mentioned venereal conditions in pregnant women. These are supervised ante-natally and post-natally jointly by these centres and Crumpsall Hospital and the treatment at Crumpsall Hospital is directed towards ensuring a safe confinement and a healthy child.

Arrangements were made in August, 1936, for the occupancy of two beds in the Edge Lane Hospital, Liverpool, an institution which is approved by the Ministry of Health, for the reception of young women (and also any child accompanying its mother) suffering from venereal disease. The residents are under the care of a matron and a visiting medical officer and are made thoroughly comfortable and happy during their stay. Girls for admission are chosen with the help of the Secretary of the Manchester Diocesan Association for Preventive and Rescue Work and during the year five females and three babies have received treatment in the hospital, in-patient days for females numbering 388 and for babies 156.

FINANCE.

A statement prepared by the City Treasurer shows that the total net expenditure on the scheme for the year 1937 was as follows:—

A.—Apportionable Expenditure.

	£
Manchester University, Department of Pathology	516
Ancoats Hospital	2,483
Manchester and Salford Hospital for Skin Diseases	1,104
St. Luke's Hospital	4,604
Manchester Royal Infirmary	3,609
St. Mary's Hospital	1,015
Manchester Royal Eye Hospital	970
Approved arsenobenzene compounds issued by the Medical Officer of Health	179
Auxiliary centre for females	510
	<hr/>
	£14,990

B.—Non-apportionable Expenditure.

Treatment of Manchester patients by other local authorities	£ 2,310
Edge Lane Hospital, Liverpool	54
Maternity and Child Welfare Centres	376
Publicity	36
Printing, stationery, and advertising	48
Administration expenses	379
	<hr/>
	£3,203
	<hr/>
Total expenditure for the year	<u>£18,193</u>

The total cost per attendance is 3s. 10·99d., an increase of 1½d. on last year's figure of 3s. 9·41d. Comparing the six hospitals, the highest cost per attendance is at St. Mary's (6s. 5·34d.) and the lowest at the Manchester Royal Eye Hospital (2s. 8·98d.). If intermediate treatments are included in the calculation, the cost per attendance works out at approximately 1s. 10d.

No action under the Venereal Disease Act, 1917, has been taken during the year. This Act relates mainly to the treatment of persons suffering from venereal disease by unqualified practitioners.

TABLE I.
SYPHILIS.

TOTAL NUMBER OF PERSONS ATTENDING MANCHESTER CLINICS SUFFERING FROM SYPHILIS AND AVERAGE NUMBER OF ATTENDANCES PER INDIVIDUAL, 1926-1937.

Year	Number of Patients	Number of Attendances	Average Number of Attendances per Patient
1926-30 (average per annum)	3,538	32,875	9·3
1931-35 (average per annum)	2,670	43,111	16·2
1931	3,021	38,105	12·6
1932	2,645	46,601	17·6
1933	2,603	47,175	18·1
1934	2,494	44,186	17·7
1935	2,586	39,490	15·3
1936	2,709	40,330	14·9
1937	2,441	36,648	15·0

TABLE 2.
GONORRHŒA.

TOTAL NUMBER OF PERSONS ATTENDING MANCHESTER CLINICS SUFFERING
FROM GONORRHŒA AND AVERAGE NUMBER OF ATTENDANCES
PER PATIENT, 1926-1937.

Year	Number of Patients	Number of Attendances	Average Number of Attendances per Patient
1926-30 (average per annum)	3,670	43,824	11.9
1931-35 (average per annum)	2,915	74,703	26.0
1931	3,465	58,979	17.0
1932	2,847	76,544	26.7
1933	2,769	76,517	27.6
1934	2,772	76,723	27.7
1935	2,722	84,753	31.1
1936	2,572	88,403	34.4
1937	2,497	110,149	44.1

TABLE 3.
SHOWING TOTAL NUMBER OF ATTENDANCES AT THE MANCHESTER CLINICS,
1926-1937.

Year	Number of Attendances
1926-30 (average per annum) ..	83,668
1931-35 (.. ..) ..	124,325
1931	103,814
1932	128,768
1933	129,629
1934	127,755
1935	131,660
1936	138,067
1937	159,179

TABLE A.
GENERAL SUMMARY OF THE WORK DONE AT ALL THE CENTRES DURING 1937.

	Syphilis		Soft Chancre		Gonorrhœa		Conditions other than Venereal		Totals	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
1. Number of cases on 1st January, 1937, under treatment or observation	831	724	7	...	732	204	84	102	1654	1030
2. Number of cases removed from the register during any previous year which returned during the year under report for treatment or observation of the same infection	56	42	1	...	25	16	...	2	82	60
3. Number of cases dealt with for the first time during the year under report (exclusive of cases under Item 4) suffering from	394	301	41	...	1130	243	782	627	2347	1171
4. Number of cases dealt with for the first time during the year under report known to have received treatment at other Centres for the same infection, or to have been under observation at other Centres... .. .	62	31	1	...	124	23	2	2	189	56
Totals of Items 1, 2, 3, and 4.	1343	1098	50	...	2011	486	868	733	4272	2317
5. Number of cases discharged after completion of treatment and final tests of cure	202	92	21	...	553	77	757	566	1533	735
6. Number of cases which ceased to attend before completion of treatment and were, on first attendance, suffering from	202	205	16	...	331	104	...	...	549	309
7. Number of cases which ceased to attend after completion of treatment but before final tests of cure	124	60	2	...	328	32	...	...	454	92
8. Number of cases transferred to other centres or to institutions, or to care of private practitioners	103	53	6	..	203	45	...	...	312	98
9. Number of cases remaining under treatment or observation on 31st December, 1937	712	688	5	...	596	228	111	167	1424	1083
Totals of Items 5, 6, 7, 8, and 9 (These Totals should agree with those of Items 1, 2, 3, and 4)	1343	1098	50	...	2011	486	868	733	4272	2317
10. Number of cases included in Item 6 which failed to complete one course of treatment.. .. .	62	67	...	...	...	...	...	...	62	67
11. Number of attendances:— (a) for individual attention of the medical officers	20897	14949	256	...	19456	6317	3175	2010	43784	23276
(b) for intermediate treatment, e.g., irrigation, dressing	802	...	6858	...	72572	11804	...	83	80232	11887
Total Attendances	21699	14949	7114	...	92028	18121	3175	2093	124016	35163
12. In-patients:— (a) Total number of persons admitted for treatment during the year	30	22	1	...	63	10	...	1	94	33
(b) Aggregate number of "in-patient days" of treatment given	915	876	5	...	1182	154	...	7	2102	1037
13. Number of cases of congenital syphilis in Item 3 above classified according to age periods	Under 1 year		1 and under 5 years		5 and under 15 years		15 years and over		Totals	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
	5	9	1	2	13	10	21	21	40	42

TABLE B.—SHOWING THE WORK DONE AT SIX VENEREAL DISEASE CLINICS AND AT TWO CHILD WELFARE CENTRES DURING 1937.

PARTICULARS	MANCHESTER ROYAL INFIRMARY				ANCOATS HOSPITAL				HOSPITAL FOR SKIN DISEASES				ST. LUKE'S HOSPITAL				ST. MARY'S HOSPITAL				MANCHESTER ROYAL EYE HOSPITAL				CHILD WELFARE CENTRE, HIGHER ARDWICK				CHILD WELFARE CENTRE, LOWER MOSS LANE				TOTALS FOR THE YEAR				GRAND TOTALS—ALL AREAS (Compared with corresponding figures for 1936)					
	Sy.	S.C.	G.	Not V.D.	Sy.	S.C.	G.	Not V.D.	Sy.	S.C.	G.*	Not V.D.	Sy.	S.C.	G.	Not V.D.	Sy.	S.C.	G.	Not V.D.	Sy.	S.C.	G.	Not V.D.	Sy.	S.C.	G.	Not V.D.	Sy.	S.C.	G.	Not V.D.	Sy.	S.C.	G.	Not V.D.	1937	1936				
New Cases	244	..	441	357	123	18	234	204	86	..	20	144	98	23	613	249	34	..	59	193	82	..	..	6	18	..	4	148	3	..	2	108	695	41	1373	1409	3518	3644		
Total cases treated	1011	..	750	420	289	21	421	236	328	..	20	154	263	29	1123	274	148	..	164	247	271	..	..	11	101	..	11	156	30	..	8	113	2441	50	2497	1601	6589	6991		
Cases discharged after completion of treatment	154	..	210	352	26	11	121	203	36	..	..	154	72	10	268	206	5	..	30	171	..	..	..	11	..	..	..	128	1	..	1	108	294	21	630	1323	2268	2506
Cases ceasing to attend Clinic— (A) Before completion of treatment	140	..	143	..	60	4	82	..	73	..	..	..	25	12	165	..	32	..	44	..	74	..	..	..	1	..	..	..	2	..	1	..	407	16	435	..	858	995
(B) After completion of treatment, but before final tests as to cure	63	..	34	..	54	2	119	..	12	..	..	..	49	..	207	..	1	..	..	..	5	..	..	..	..	..	..	..	..	..	..	..	184	2	360	..	546	375
(C) Transferred to other Treatment Clinics	39	..	94	..	13	2	15	..	48	..	20	..	41	4	117	..	1	..	..	..	10	..	..	..	1	..	1	..	3	..	1	..	156	6	248	..	410	431
Attendances at the Out-patient Clinic	15618	..	6516	1374	5534	83	4164	621	3842	..	20	25	4089	173	14041	1438	1509	..	863	779	4149	..	..	34	648	..	68	375	457	..	101	310	35846	256	25773	5185	67060	69033		
Intermediate treatment ..	541	..	18412	..	..	..	10868	..	..	..	..	..	261	6858	52209	..	..	..	197	83	..	..	..	..	..	..	..	..	..	..	..	802	6858	84376†	83	92119	69034	
In-patient Days .. .. .	..	..	..	..	..	..	..	..	29	..	..	..	612	5	1336	7	..	..	..	..	1150	..	..	..	..	..	..	..	..	..	..	..	1791	5	1336	7	3139	2828
Doses of approved arsenobenzene compounds given	3705	..	..	..	1528	..	..	..	601	..	..	..	1359	..	..	..	579	..	..	..	1978	..	..	..	197	..	..	..	145	..	..	..	..	..	..	10092	11141	
Pathological Examinations made— A. (Centre)	Wass.	Spir.	Gon.	Other Organisms	Wass.	Spir.	Gon.	Other Organisms	Wass.	Spir.	Gon.	Other Organisms	Wass.	Spir.	Gon.	Other Organisms	Wass.	Spir.	Gon.	Other Organisms	Wass.	Spir.	Gon.	Other Organisms	Wass.	Spir.	Gon.	Other Organisms	Wass.	Spir.	Gon.	Other Organisms	Wass.	Spir.	Gon.	Other Organisms	Wass.	Spir.	Gon.	Other Organisms		
B. (Approved Laboratories) ..	1525	759	10	1002	..	589	543	..	34	..	243	..	6	1	314	197	..	91	..	98	..	54	..	4268	10	1187	1	4268	10	1187	4829	145	9091

* Gonorrhœa cases transferred to other centres. † Includes 2690 attendances made by patients at Monsall Auxiliary Centre for Females.

TABLE C.—WORK DONE IN THE VENEREAL DEPARTMENT,
CRUMPSALL HOSPITAL, DURING 1937.

TOTAL ADMISSIONS.

	Syphilis	Gonorrhœa	Conditions other than Venereal	Total
Males	23	80	19	122
Females	36	16	8	60
	59	96	27	182

During the year 31 persons were treated with approved arsenobenzene compounds, six being males and 25 females. The number of injections given was 183.

There were ten normal births in this department of the hospital and four still-births occurred. Of these fourteen births eleven were born without any sign of specific disease and with negative Wassermanns, two were syphilitic at birth, and one baby died one day old, the cause of death being prematurity.

The average length of time under treatment for these fourteen cases was 29 days.

Pathological Examinations :—

WASSERMANN REACTION				GONOCOCCI				SPIROCHÆTES			
Positive	Negative	Doubtful	Total Examined	Positive	Negative	Doubtful	Total Examined	Positive	Negative	Doubtful	Total Examined
49	103	7	159	44	93	..	137	..	..	..

TABLE D.—AUXILIARY CENTRE FOR FEMALES AT MONSALL HOSPITAL.

SHOWING NUMBER OF PERSONS TREATED AT THE CENTRE DURING 1937.

PARTICULARS	Gonorrhœa	Syphilis and Gonorrhœa	Not V.D.	Total
1. Number of females who on 1st January, 1937, were under treatment for	30	..	..	30
2. Number of new patients who attended during the year for the first time— (a) Name of Clinic from which patient came— Ancoats Hospital	35	..	..	35
Manchester Royal Infirmary	6	..	..	6
St. Luke's Hospital	2	..	..	2
Higher Ardwick Welfare Centre.. ..	4	..	..	4
Lower Moss Lane Welfare Centre ..	1	..	..	1
(b) Cases referred to the Centre by Medical Practitioners	14	..	..	14
3. Old patients who have returned for treatment after discontinuing attendance for some time— (a) From Clinics— Ancoats Hospital	4	..	..	4
(b) Cases referred by Medical Practitioners..	..	..	..	..
Total item 2 (new patients)	62	..	..	62
Total items 1, 2, and 3—Total patients attending during 1937	96	..	..	96
4. Cases discharged cured :— (a) Ancoats Hospital	29	..	..	29
Manchester Royal Infirmary	8	..	..	8
St. Luke's Hospital	1	..	..	1
St. Mary's Hospital.. .. .	2	..	..	2
Higher Ardwick Welfare Centre.. ..	3	..	..	3
Lower Moss Lane Welfare Centre.. ..	1	..	..	1
(b) Medical Practitioners' Cases	16	..	..	16
Total item 4.—Cases discharged cured	60	..	..	60
5. Discontinued attendance	9	..	..	9
6. Transferred to other Clinics .. .. .	..	..	..	..
7. Number of patients still attending on Jan. 1st, 1938	27	..	..	27

The number of new patients was 62, which compares with 60 in the previous year and 87 in 1935. Over half the cases came from Ancoats Hospital.

The total number of attendances was 2,690, an average of 28·0 per person, there being 25 patients who attended on more than 30 occasions.

404 Sitz baths were given during the year.

	SYPHILIS				GONORRHOEA								KAHN TEST							
	WASSERMANN REACTION				SPIROCHÆTES				MICROSCOPICAL EXAMINATION				COMPLEMENT FIXATION TEST							
	Positive	Negative	Doubtful	Total Examined	Positive	Negative	Doubtful	Total Examined	Positive	Negative	Doubtful	Total Examined	Positive	Negative	Doubtful	Total Examined				
A. Work done at the Public Health Laboratory (University Bacteriological Department):—																				
Manchester Royal Infirmary	608	723	165	1,496	..	..	..	..	..	..	..	..	4	5	1	10	..	1	..	..
St. Luke's Hospital	106	420	27	553	..	..	..	..	..	..	..	..	7	19	2	28	..	4	..	..
Ancoats Hospital	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Hospital for Skin Diseases	229	317	40	586	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
St. Mary's Hospital	39	217	10	266	..	..	..	..	..	..	..	..	2	5	2	9	..	..	..	..
Manchester Royal Eye Hospital	105	900	10	1,015	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
Two Maternity and Child Welfare Centres	39	242	10	291	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Non-approved Institutions	281	1,906	43	2,230	..	..	..	..	..	..	..	..	5	68	6	71	..	7	..	..
Medical Practitioners	206	847	26	1,079	1	7	..	8	71	318	..	389	15	50	8	73	..	4	..	..
Total work done at Public Health Laboratory	1,613	5,572	331	7,516	1	7	..	8	88	538	..	626	44	128	19	191	..	18	..	22
B. Work done by Hospital Pathologist:—																				
Ancoats Hospital	308	422	39	769	..	..	..	..	91	894	17	1,002	..	..	..	..	..	..	..	..
C. Work done by Clinical Pathologist at Clinics:—																				
Manchester Royal Infirmary	..	..	..	..	38	33	..	71	507	1,551	..	2,058	..	..	..	..	..	..	..	..
St. Luke's Hospital	..	..	..	..	21	22	..	43	551	6,170	130	6,851	..	..	..	..	..	..	..	..
St. Mary's Hospital	..	..	..	..	..	..	..	..	31	387	1	419	..	..	..	..	..	..	..	..
Total of A, B, and C	1,921	5,994	370	8,285	60	62	..	122	1,268	9,540	148	10,956	44	128	19	191	..	18	..	22

EARLY PREVENTIVE TREATMENT,
St. Luke's Hospital.

With the approval of the Public Health Committee and the City Council an Early Preventive Treatment Clinic for males was opened at St. Luke's Hospital on April 1st and is still in being at the time this report is written. The establishment of the clinic was made known to the public by posters placed in all public conveniences for males in the city and these posters are renewed from time to time. The treatment is given by a skilled orderly.

(1) *Extent of User.*

The number of persons presenting themselves for treatment is given below in three separate quarters for the purpose of comparison :—

<i>Persons</i>		<i>Persons</i>		<i>Persons</i>	
April	127	July	214	October	240
May	283	August	161	November.....	185
June	191	September	189	December	217
<hr/>		<hr/>		<hr/>	
601		564		642	

The total number of persons attending, therefore, was 1,807 during the three quarters. Of the 1,807 persons, 1,196 resided in Manchester and the remainder (611) in other districts.

(2) *Age Groups.*

The ages of those attending were as follows :—

<i>Ages</i>	<i>Persons</i>
15—20	8
20—30	1,023
30—40	626
40 and over	150

} 1,807

(3) *Lapse of time after exposure.*

Men who presented themselves more than six hours after exposure to possible infection were referred to the ordinary venereal disease clinic for observation and treatment if necessary. Of those attending 1,321 or 74 per cent. were within the six hour limit.

(4) *Analysis of hours.*

It may be of interest to note the hours during which persons came for treatment. These times are given hereunder :—

Between 7 a.m. and 12 noon	348 persons
Between 12 noon and 6 p.m.	207 „
Between 6 p.m. and 12 midnight	416 „
Between 12 midnight and 7 a.m.	836 „
<hr/>	
1,807	

It is significant that no persons receiving this preventive treatment reported subsequently at any of the clinics with established disease.

WELFARE OF THE BLIND.

Blind persons over the age of sixteen are dealt with by the Blind Persons Welfare Committee, the Education Committee being responsible for the fees for training.

The routine certification of blind persons is carried out by Dr. H. V. White, and the functions of referee by Dr. H. H. McNabb, both of whom are ophthalmic surgeons in practice in the city.

Financial assistance is granted to necessitous blind persons who are registered as being ordinarily resident within the city. The grants awarded are taken to the homes of the people by the home teachers of the Manchester and Salford Blind Aid Society, who also teach the Braille and Moon methods. The Blind Aid Society also assist them with pastime occupations and look after their comfort and welfare generally. The average number of visits made per month is 2,205.

The technical training of young persons and the employment of blind persons who are not incapable of work are provided for at Henshaw's Institution for the Blind, Old Trafford, and in the workshops in Warwick Road, Old Trafford. Brushes, baskets, mats, knitwear, boot and shoe making and repairing, mattresses, and furniture, etc., are made in the workshops and there is a sales shop in the city (129, Oxford Road).

The following are the numbers of workers engaged in the workshops :—

Men	..	..	..	..	..	97
Women	..	..	..	..	..	22
						—
Total	..	..	..	..	..	119
						—

Homeworkers are dealt with by Henshaw's Institution, under an approved scheme, and they, as well as workshop employees, receive substantial augmentation of earnings, also other charitable grants.

Homes for the aged men and women and those incapable of work are provided by the two voluntary agencies, as follows :—

One home at Rhyl	For men only	}	Provided by Henshaw's Institution
One home at Old Trafford ..	For aged men and women		
One home at Southport ..	Residents of both sexes who are boarded out in the summer months when it is used as a holiday home for blind people	}	Provided by the Manchester and Salford Blind Aid Society
Four homes at Pendleton ..	For aged men and women		
One hostel at Old Trafford.	For trainees over 21 years is also provided by Henshaw's Institution		

All are situated in spacious grounds with healthy surroundings and the occupants receive every comfort and kindness.

During the year 107 new cases of blindness have been registered ; 91 of these were over 50 years of age.

With reference to the fall in infantile blindness it is most encouraging to observe that, on examination of the register, it is found that out of a total of 1,268 cases the number of blind children under 16 years of age is only 30, of whom three are infants under the age of five years.*

I am indebted to Mr. John W. Turner, Superintendent and Secretary of the Manchester and Salford Blind Aid Society, for the following analysis and summary of the register for the twelve months ended 31st March, 1938, also the classification of cases and causes of blindness.

* In this connection reference should be made by readers to the reports on ophthalmia neonatorum and on the treatment of venereal diseases on pages 291 to 298 and 248 to 356.

MANCHESTER AND SALFORD BLIND AID SOCIETY.
CITY OF MANCHESTER.
Summary of Register of Blind Persons.

	Twelve months ending March 31st, 1938	Twelve months ending March 31st, 1937
Number of cases on the Register at March 31st, 1937	1,244	1,265
<i>Add—</i>		
Number of new cases	107	94
Number of cases re-certified by Referee- Service	2	6
Removals into Area— <i>i.e.</i> , cases at Henshaw's Institution and other Training Institutions	8	7
Non-grant cases	13	9
Grant cases	17	22
	— 38	— 38
	1,391	1,403
<i>Deduct—</i>		
Number of deaths	93	107
Removals out of Area— <i>i.e.</i> , cases at Henshaw's Institution and other Training Institutions	5	14
Non-grant cases	13	11
Grant cases	6	21
	— 24	— 46
Number of cases de-certified	6	6
	— 123	— 159
Number of cases on the Register at March 31st, 1938	1,268	1,244
<i>i.e.</i> , Males Females	622 646	604 640

MANCHESTER AND SALFORD BLIND AID SOCIETY.
CITY OF MANCHESTER.

Registration Statistics of Blind Population.

	At March 31st, 1938	At March 31st, 1937
I. ANALYSIS OF REGISTER.		
<i>Children.</i>		
Under 5 years of age	3	3
5 to 16 years of age—		
At school	24	23
Not at school	3	3
<i>Adults over 16 years of age.</i>		
Under training	29	31
Not training, but trainable	1	—
Trained but unemployed	1	2
Employed at Blind Institutions, or elsewhere	194	209
Unemployable	1,013	973
	1,268	1,244
2. AGE PERIODS.		
0—5	3	3
5—16	27	26
16—21	20	26
21—40	198	190
40—50	157	164
50—65	323	324
65—70	151	147
Over 70	389	364
	1,268	1,244

MANCHESTER AND SALFORD BLIND AID SOCIETY.
CITY OF MANCHESTER.

Summary of Statistics for the last Eight Years, 1930-1938.

Year ended March 31st	Total on Register	Cases Registered during the year	Cases Re-certified	Deaths	Cases De-certified	Transfers	
						Into Area	Out of Area
1931 ..	1,205	128	..	70	..	15	28
1932 ..	1,220	173	..	120	7	17	48
1933 ..	1,220	124	..	114	11	33	32
1934 ..	1,207	116	..	98	18	27	40
1935 ..	1,252	100	..	67	8	47	27
1936 ..	1,265	116	9	94	19	26	25
1937 ..	1 244	94	6	107	6	38	46
1938 ..	1,268	107	2	93	6	38	24

MANCHESTER BLIND AID SOCIETY.

CITY OF MANCHESTER.

*Classification of Cases of Blindness Certified and Registered from
1st April, 1937, to 31st March, 1938.*

	Males	Females	Total
New cases from April 1st, 1937, to March 31st, 1938..	58	49	107
Cases re-certified by Referee Service	1	1	2
19 males receiving P.A.C. grants 2 female " P.A.C. " 20 males " B.W.C. " 35 females " B.W.C. "	} 76 grants.		
Number of deaths during the 12 months	44	49	93

New Cases	Ages at which Blindness occurred			Present Age Period		
Age Period	Males	Females	Total	Males	Females	Total
0—1	1	..	1	..	..	..
1—5	1	..	1	2	..	2
5—10 .. .. .	..	..	..	..	..	..
10—20	1	..	1	1	..	1
20—30	2	..	2	2	..	2
30—40	4	2	6	4	2	6
40—50	3	2	5	3	2	5
50—60	5	1	6	5	1	6
60—70	16	11	27	16	11	27
70—80	18	22	40	17	22	39
Over 80	7	11	18	8	11	19
	58	49	107	58	49	107

Single	11	6	17
Widowed	16	33	49
Married and separated	3	3	6
Married	28	7	35
	58	49	107

Physical and Mental Defects.

Deaf	3	4	7
Deaf and dumb .. .. .	..	..	..
Physical	2	6	8
Mental and Physical .. .. .	..	..	..
Deaf and Physical	1	..	1
	6	10	16

CAUSES OF BLINDNESS.

Sections	Sub-sections	Males	Females	Total
A. Congenital and Undetermined Cases	1. Congenital, hereditary, and developmental defects ..	6	..	6
	2. Myopic error .. .. .	..	2	2
	4. Glaucoma, primary	8	7	15
	5. Cataract, primary	22	27	49
	6. Other primary ocular defects, <i>e.g.</i> , primary detachment of retina	1	..	1
B. Infectious and Bacterial	3. Syphilis—(a) Congenital ..	..	2	2
	(b) Acquired ..	2	..	2
	4. Trachoma .. .. .	..	1	1
D. General Diseases.	2. Vascular diseases, including cerebral vascular lesions ..	2	2	4
	5. Intracranial neoplasm ..	1	..	1
	6. Diabetes	1	1	2
E. No information obtainable	.. .. .	15	7	22
		58	49	107

Further 125 cases were examined but found not to be blind within the meaning of the Blind Persons Act, 1920, including 2 removals into the Area and 3 cases already on the Register sent for further examination and de-certified.

REFEREE SERVICE.

Nine cases were submitted to the Referee Surgeon, with results as follows :—

Decision of ophthalmic surgeon upheld	4
(Includes two cases not previously on Blind Register.)	
Decision of ophthalmic surgeon reversed, <i>i.e.</i> , not blind to blind	5
(Includes three cases not previously on the Blind Register.)	
	—
	9
	—

PUBLIC HEALTH EDUCATION.

Lectures.

Local societies and organisations of various kinds are circularised from time to time regarding the lectures which are offered free of charge by the Public Health Committee.

The number of lectures given to such bodies was 120, the cost being approximately £120. One guinea and incidental expenses are paid for each lecture, except for those on venereal diseases, the fee for which is two guineas (including expenses). Forty-eight of the 120 lectures were given by members of the staff of this department, who did not receive any fees.

Below is a statement showing how the 120 lectures were distributed :—

Co-operative Guilds—

Women	23
Men	7
Mixed	5

Church Organisations—

Men's meetings	3
Women's meetings	5
Women Citizens' Association	13
Elementary Day Schools (Parents' Meetings)	45
District Nursing Association	3
Boy Scout Troops	1
Toc H Branches	7
Girls' Clubs	3
Other organisations	5

Total 120

TITLES OF LECTURES AND NUMBER OF TIMES GIVEN.

Lecture	Number of Times Given	Number of Persons Attending
1. Microbes: Friends and Foes	2	60
2. The Story of Preventive Medicine	2	50
3. Sunlight and Health	2	70
4. The Change of Life	2	65
5. Our Bodies and How we Live	3	62
6. Housing and Health	2	30
7. Venereal Diseases	1	40
8. Protection of Foods, Drugs, etc.	1	25
9. Diphtheria: Its Dangers and Prevention	45	1,486
10. Foods: Values and Prices	14	445
11. Prostitution: A Social Problem	1	32
12. Antidotes to Anxiety	1	40
13. Smoke and Health	3	95
14. The Romance of Medical Science	4	85
15. Recent Advances in Medical Research	10	694
16. The Fears of the Child	1	35
17. Health: How to Keep It	6	295
18. Health and Hygiene	1	36
19. Wise Middle Age	8	520
20. Laughter and Health	2	57
21. Seeing What Isn't There	1	28
22. The Fear of Disease	1	50
23. Habit Making and Breaking	1	26
24. Interest in Life: Keeping and Losing It	3	118
25. Hobbies and Health	1	50
26. Manchester Public Health Services	2	50
Totals	120	4,544
Average Attendance		38

"Better Health."

The following articles appeared in the Journal "Better Health" during the year:—

1. "Influenza"—Dr. McClure.
2. "Whooping Cough"—Dr. D. Sage Sutherland, Medical Superintendent, Monsall Hospital.
3. "The Common Cold"—Dr. McClure.
4. "Babies' Feet" Article 1—Dr. N. F. Smith.
5. "Babies' Feet" Article 2—Dr. N. F. Smith.
6. "Precautions against Diarrhœa in Infants"—Dr. Veitch Clark.
7. "Municipal Midwives Service"—Dr. Veitch Clark.
8. "The House Fly"—Dr. McClure.
9. "Measles"—Dr. Veitch Clark.
10. "National Rat Week"—Circular issued by the Public Health Department.
11. "Milk—From the Farm to the Consumer"—Mr. R. C. Locke, Veterinary Officer.
12. "Clean Teeth do not Decay"—Mr. G. G. Ellis, School Dentist, Manchester Education Committee.

This journal is issued monthly, and the distribution of ten thousand copies is effected through the public free libraries, the maternity and child welfare clinics, the tuberculosis clinic, Baguley Sanatorium, and by a number of large firms throughout the City. A very efficient and inexpensive method of bringing health matters to the notice of the citizens is thus achieved by the circulation of "Better Health" each month.

AMBULANCE AND DISINFECTING STATION.

The station is open day and night for the removal of infectious disease cases and for the collection and disinfection of infected bedding.

Staff:—

Manager.

Motor mechanic.

Three clerks.

Fifteen ambulance officers.

Five disinfectors.

Nine labourers.

One cleansing nurse.

Two part-time cleansing nurses.

One woman attendant.

Ambulances :—

There is a fleet of seven ambulances in use for the removal of infectious disease cases, including tuberculosis. During the year under review the number of cases removed to hospital was 6,742. The mileage covered was 85,584.

Disinfection.

For the disinfection of bedding, clothing, etc., two steam disinfectors are installed at the station. For articles which cannot be subjected to steam, disinfection by formalin is carried out in a chamber built for the purpose. Three motor bedding vans are used for the removal of infected bedding, clothing, etc., and during the year 1937, 96,924 articles were removed. The mileage covered by the bedding vans was 42,946.

The following table shows the number and type of articles disinfected each month during the year :—

Articles Disinfected at Monsall Ambulance Station.

Month ending 1937	Blankets	Sheets	Pillows	Bolsters	Quilts	Mattresses	Beds	Carpets	Articles of Clothing	Sundry Articles	Total
January ..	1,208	327	1,462	458	722	261	675	6	2,697	538	8,354
February ..	926	269	1,261	434	568	232	609	13	2,511	474	7,297
March ..	957	240	1,309	473	583	295	611	—	3,105	514	8,087
April	2,210	286	1,500	605	615	266	848	1	2,896	914	10,141
May	931	310	1,121	377	510	280	528	4	1,483	335	5,879
June	1,322	410	1,413	505	563	308	681	7	1,985	359	7,553
July	921	436	1,321	453	592	358	579	4	2,226	435	7,325
August ..	577	289	1,447	443	400	361	595	4	1,823	334	6,273
September .	1,336	410	1,680	567	720	318	784	8	2,698	511	9,032
October ..	1,208	333	1,655	539	809	338	796	10	3,137	489	9,314
November .	1,300	324	1,575	529	747	372	667	17	3,387	557	9,475
December .	1,300	295	1,453	458	778	337	579	4	2,442	548	8,194
	14,196	3,929	17,197	5,841	7,607	3,726	7,952	78	30,390	6,008	96,924

Steam Disinfector	93,437	Articles
Formic Aldehyde Chamber	1,340	Mattresses
“ “	2,147	Books
	<u>96,924</u>	Total

Disinfectors.

Three disinfectors are employed for fumigation of rooms, etc., in which cases of tuberculosis have occurred, and for general disinfection after cases of smallpox and typhus fever.

Garage.

The station garages the ambulances and bedding vans, and, in addition, three motor cars which are owned by the Public Health Committee.

CLEANSING STATION.

The cleansing station at Monsall Road, Newton Heath, is used for the treatment of scabies, cleansing of persons from the clearance areas, and verminous persons.

A cleansing nurse supervises the work and is assisted by two attendants.

The following table shows the number of cases treated during the year :—

Month	Scabies (treatments)	Voluntary cleansings	Compulsory cleansings	Dis- infestation	Special cases	Totals
January	173	6	—	94	—	273
February	120	7	—	99	—	226
March	187	6	3	111	—	307
April	124	8	—	186	—	318
May	87	4	4	80	—	175
June	195	8	15	98	—	316
July	186	8	—	112	—	306
August	56	1	—	117	—	174
September	240	9	14	97	—	360
October	157	3	10	137	1	308
November	147	5	5	174	—	331
December	166	4	4	104	2	280
Totals	1,838	69	55	1,409	3	3,374

REPORT OF THE SANITARY SECTION.

By I. PRIESTLEY, F.S.I.A., M.R.SAN.I., CHIEF SANITARY INSPECTOR.

FOOD SUPERVISION.

The department has continued to exercise its powers to ensure that the food supplies of the city are maintained free from adulteration and contamination.

Prevention of Food Adulteration.

3,250 samples of food and drugs have been procured by the three sampling officers for analysis by the Public Analyst. The majority of the samples are of articles which are consumed daily by all classes of the community. Many other commodities, less frequently used, are included in the samples taken. Altogether 119 different articles of food and drugs have been sampled.

The practice of obtaining informal samples has been continued, and 360 of the total samples analysed were obtained by this method. Private purchasers submitted 3 samples and 2,890 were procured in accordance with the provisions of the Food and Drugs Acts and Regulations.

Ninety samples failed to conform to the required standards, equivalent to 2.77 per cent. of the total samples.

Milk supplies have been subjected to constant and rigorous supervision to ensure that purity and nutritive value are maintained.

1,384 samples of milk were analysed, of which 62 were reported to be adulterated, a percentage of 4.48.

The statement which follows enables a comparison to be made of the food supplies of Manchester with those of the rest of the country over the five years 1933 to 1937.

Year	Percentage of Samples Adulterated			
	Milk		All Food and Drugs	
	Manchester	Average for England	Manchester	Average for England
1933	7.98	7.7	4.41	5.5
1934	5.79	7.2	3.14	5.3
1935	5.35	7.4	2.98	5.5
1936	3.73	7.1	1.75	5.3
1937	4.48	7.0	2.77	5.5

The monthly and quarterly averages of the composition of milk samples are shown in the following table. The averages for the past five years are included, from which it will be seen that a quality higher than the standard prescribed by the Ministry of Agriculture has been maintained.

TABLE I.
COMPOSITION OF MILK SAMPLES.

Month	Number of Samples	Fatty Solids	Non-fatty Solids	Total Solids	Quarter	Number of Samples	Fatty Solids	Non-fatty Solids	Total Solids
		Per cent.	Per cent.	Per cent.			Per cent.	Per cent.	Per cent.
January ..	110	3.49	8.89	12.38	FIRST QUARTER	367	3.47	8.87	12.34
February ..	125	3.48	8.89	12.37					
March	132	3.44	8.83	12.27					
April	92	3.43	8.82	12.25	SECOND QUARTER	354	3.4	8.93	12.33
May	119	3.40	8.95	12.35					
June	143	3.37	9.0	12.37					
July	102	3.39	8.9	12.29	THIRD QUARTER	315	3.49	8.91	12.4
August	106	3.47	8.86	12.33					
September ..	107	3.59	8.99	12.58					
October	121	3.73	8.98	12.71	FOURTH QUARTER	348	3.66	8.97	12.63
November ..	120	3.65	8.97	12.62					
December ..	107	3.61	8.94	12.55					
Average for the year 1937						1,384	3.5	8.92	12.42
„ „ 1936						1,368	3.51	8.97	12.48
„ „ 1935						1,401	3.48	8.93	12.41
„ „ 1934						1,434	3.46	8.92	12.38
„ „ 1933						1,378	3.47	8.87	12.34
Requirements of the Sale of Milk Regulations, 1901							3.0	8.5	11.5

Comparison of adulteration in milk samples taken on Sundays and on week-days :—

	Number taken	Genuine	Adulterated	Percentage adulterated
Samples taken on Sundays	120	115	5	4.17
Samples taken on week-days	1,264	1,207	57	4.51

The sampling officers also procured 836 samples of milk at railway stations and from vehicles entering the city by road for examination for the presence of tubercle bacilli.

ADULTERATED SAMPLES.

Seventy-two statutory samples were found to be adulterated or otherwise to contravene the Acts and Regulations. The offenders were cautioned in the majority of cases, as the offences were only slight. In 15 instances prosecutions ensued which resulted in the infliction of penalties and costs which totalled £17 8s. (for details see Table II., page 370).

Where informal samples indicated adulteration or the presence of preservatives, statutory samples were obtained wherever possible.

TABLE II.

SHOWING THE PROCEEDINGS TAKEN UNDER THE PROVISIONS OF THE ADULTERATION OF FOOD AND DRUGS AND THE MARGARINE ACTS DURING THE YEAR 1937.

INFORMAL SAMPLES		ARTICLE	STATUTORY SAMPLES			PROSECUTIONS						
Number Obtained	Number Adulterated		Number Obtained	Number Adulterated	Referred to Town Clerk for legal proceedings	Number cautioned as the Adulteration was only slight	Number summoned before Magistrates	Number Fined	Number ordered to pay Costs only	Dismissed or Withdrawn	Amount of Fines Imposed	Amount of Costs ordered to be paid
											£ s. d.	£ s. d.
..	..	Almonds, Ground	11	2	2	..	2	2	..	..	4 0 0	1 1 0
..	..	Arrowroot, Ground	4	..	..	..	..	..	..	..	..	..
4	..	Bacon and Ham	40	..	..	..	..	..	..	..	..	..
..	..	Baking Powder	9	..	..	..	..	..	..	..	..	..
1	..	Barley	31	..	..	..	..	..	..	..	..	..
..	..	Bicarbonate of Soda	12	..	..	..	..	..	..	..	..	..
..	..	Borax	7	..	..	..	..	..	..	..	..	..
..	..	Borax, Glycerine of	6	..	..	..	..	..	..	..	..	..
1	..	Boric Acid	11	..	..	..	..	..	..	..	..	..
..	..	Bread	33	..	..	..	..	..	..	..	..	..
..	..	Bread and Butter	2	..	..	..	..	..	..	..	..	..
*11	*1	Butter	54	1	1	..	1	1	..	..	5 0 0	0 15 6
..	..	Buttermilk	3	2	2	..	2	2	..	..	0 10 0	..
4	..	Cakes, Sweet	32	..	..	..	..	..	..	..	..	..
..	..	Camphor, Compound Tincture of ..	12	..	..	..	..	..	..	..	..	..
1	..	Camphor, Spirit of	7	1	..	1	..	..	..	..	..	..
1	..	Cascara Extract	7	..	..	..	..	..	..	..	..	..
4	1	Cheese	33	..	..	..	..	..	..	..	..	..
..	..	Citric Acid	5	..	..	..	..	..	..	..	..	..
1	..	Cinnamon, Ground	11	..	..	..	..	..	..	..	..	..
2	..	Cocoa	17	..	..	..	..	..	..	..	..	..
3	..	Coffee	29	..	..	..	..	..	..	..	..	..
8	..	Coffee Essence .....	..	..	..	..	..	..	..	..	..	..
1	..	Cornflour	22	..	..	..	..	..	..	..	..	..
3	..	Cream	13	1	1	..	1	1	..	..	0 10 0	0 10 6
9	..	Cream, Tinned	2	..	..	..	..	..	..	..	..	..
..	..	Cream of Tartar	11	..	..	..	..	..	..	..	..	..
..	..	Custard Powder	21	..	..	..	..	..	..	..	..	..
..	..	Dripping	19	..	..	..	..	..	..	..	..	..
1	..	Distilled Water	2	..	..	..	..	..	..	..	..	..
5	..	Effervescing Salts	7	..	..	..	..	..	..	..	..	..
1	..	Epsom Salts	15	..	..	..	..	..	..	..	..	..
2	..	Fish, Prepared	11	..	..	..	..	..	..	..	..	..
13	..	Fish, Tinned	7	..	..	..	..	..	..	..	..	..
..	..	Flour	30	..	..	..	..	..	..	..	..	..
2	..	Flour, Self-raising	36	..	..	..	..	..	..	..	..	..
..	..	Flowers of Sulphur	5	..	..	..	..	..	..	..	..	..
1	..	Fruit, Dried	80	..	..	..	..	..	..	..	..	..
12	..	Fruit, Tinned	31	..	..	..	..	..	..	..	..	..
..	..	Gentian, Tincture of	1	..	..	..	..	..	..	..	..	..
..	..	Ginger, Ground	11	1	1	..	1	1	..	..	1 0 0	0 10 6
..	..	Glauber's Salts	21	..	..	..	..	..	..	..	..	..
1	..	Glycerine	9	..	..	..	..	..	..	..	..	..
..	..	Glycerine, Medicated	1	..	..	..	..	..	..	..	..	..
..	..	Gregory Powder	7	2	..	2	..	..	..	..	..	..
1	..	Honey	1	..	..	..	..	..	..	..	..	..
..	..	Iodine, Tincture of	12	..	..	..	..	..	..	..	..	..
..	..	Ipecacuanha, Tincture of	1	..	..	..	..	..	..	..	..	..
4	..	Jam	39	..	..	..	..	..	..	..	..	..
6	..	Jelly, Table	3	..	..	..	..	..	..	..	..	..
..	..	Lard	42	..	..	..	..	..	..	..	..	..
1	..	Lemon Cheese	7	..	..	..	..	..	..	..	..	..
1	..	Lentils and Peas	41	..	..	..	..	..	..	..	..	..
1	..	Lime Water	2	..	..	..	..	..	..	..	..	..
..	..	Liquorice, Compound Powder of ..	7	..	..	..	..	..	..	..	..	..
2	..	Macaroni	11	..	..	..	..	..	..	..	..	..
..	..	Margarine	35	..	..	..	..	..	..	..	..	..
2	..	Meat, Prepared	44	..	..	..	..	..	..	..	..	..
110	2	Carried forward	983	10	7	3	7	7	..	..	11 0 0	2 17 6

* Includes 1 private sample.

TABLE II.—*continued*

SHOWING THE PROCEEDINGS TAKEN UNDER THE PROVISIONS OF THE ADULTERATION OF FOOD AND DRUGS AND THE MARGARINE ACTS DURING THE YEAR 1937

INFORMAL SAMPLES		ARTICLE	STATUTORY SAMPLES		PROSECUTIONS						Amount of Fines Imposed			Amount of Costs ordered to be Paid		
Number Obtained	Number Adulterated		Number Obtained	Number Adulterated	Referred to Town Clerk for legal proceedings	Number cautioned as the Adulteration was only slight	Number summoned before Magistrates	Number Fined	Number ordered to pay Costs only	Dismissed or Withdrawn						
110	2	Brought forward.....	983	10	7	3	7	7	..	..	£	s.	d.	£	s.	d.
2	..	Meat, Tinned.....	9	..	..	..	..	..	..	..	..	..	..	..	..	..
12	..	Medicated Tablets and Lozenges ..	45	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	Mincemeat	9	..	..	..	..	..	..	..	..	..	..	..	..	..
3	§1	Mint, Dried .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	Mustard	5	..	..	..	..	..	..	..	..	..	..	..	..	..
108	11	Milk	1276	51	..	51	..	..	..	..	..	..	..	..	..	..
20	..	Milk, Condensed	3	..	..	..	..	..	..	..	..	..	..	..	..	..
4	..	Milk, Dried	1	..	..	..	..	..	..	..	..	..	..	..	..	..
1	..	Oatmeal	27	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	Oil, Almond.....	8	..	..	..	..	..	..	..	..	..	..	..	..	..
1	..	„ Camphorated	13	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	„ Castor	15	..	..	..	..	..	..	..	..	..	..	..	..	..
2	..	„ Cod Liver	14	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	„ Mustard	2	..	..	..	..	..	..	..	..	..	..	..	..	..
1	..	„ Neatsfoot .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..
2	..	„ Olive	14	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	„ Paraffin.....	12	..	..	..	..	..	..	..	..	..	..	..	..	..
6	..	Ointment, Boric	3	..	..	..	..	..	..	..	..	..	..	..	..	..
4	..	„ Sulphur.....	2	..	..	..	..	..	..	..	..	..	..	..	..	..
4	..	„ Zinc	2	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	Parrish's Chemical Food.....	3	..	..	..	..	..	..	..	..	..	..	..	..	..
1	..	Pepper	18	1	..	1	..	..	..	..	..	..	..	..	..	..
12	..	Pickles	22	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	Pills, Iron	1	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	Quinine Sulphate	1	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	Quinine, Ammoniated Tincture of..	8	..	..	..	..	..	..	..	..	..	..	..	..	..
1	..	Rice	38	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	Rice, Ground.....	22	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	Rhubarb, Compound Tincture of..	7	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	Salt	1	..	..	..	..	..	..	..	..	..	..	..	..	..
16	..	Sauces	3	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	Sausages	28	3	..	3	..	..	..	..	..	..	..	..	..	..
1	..	Seidlitz Powder.....	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	Senna, Confection of	1	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	Senna Pods	1	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	Squills, Syrup of	5	..	..	..	..	..	..	..	..	..	..	..	..	..
3	..	Suet	10	..	..	..	..	..	..	..	..	..	..	..	..	..
1	..	Sugar.....	59	..	..	..	..	..	..	..	..	..	..	..	..	..
2	..	Sweets	36	..	..	..	..	..	..	..	..	..	..	..	..	..
1	..	Tapioca	27	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	Tartaric Acid	1	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	Tea	51	..	..	..	..	..	..	..	..	..	..	..	..	..
4	..	Treacle	3	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	Tripe	7	..	..	..	..	..	..	..	..	..	..	..	..	..
2	..	Vegetable Fat	3	..	..	..	..	..	..	..	..	..	..	..	..	..
3	..	Vegetable, Tinned	5	..	..	..	..	..	..	..	..	..	..	..	..	..
7	1	Vinegar	17	..	..	..	..	..	..	..	..	..	..	..	..	..
3	..	Beer.....	9	..	..	..	..	..	..	..	..	..	..	..	..	..
4	..	Cider .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..
2	..	Cordials.....	4	..	..	..	..	..	..	..	..	..	..	..	..	..
3	3	Grape Juice	6	6	6	..	6	..	..	6	..	..	..	..	..	..
11	..	Mineral and Aerated Waters	18	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	Spirits :—														
..	..	Brandy	3	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	Gin	5	1	1	..	1	1	..	..	3	0	0	0	10	6
..	..	Rum	4	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	Whisky	6	..	..	..	..	..	..	..	..	..	..	..	..	..
‡3	..	Wine	11	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	Wine, Medicated.....	6	..	..	..	..	..	..	..	..	..	..	..	..	..
360	18	TOTALS	2893	72	14	58	14	8	..	6	14	0	0	3	8	0

§ This informal sample contained 30 per cent. of foreign leaves. Statutory sample could not be obtained, as the stock had been disposed of.

‡ Includes 2 private samples.

THE PUBLIC HEALTH (PRESERVATIVES IN FOOD) REGULATIONS,
1925-27.

Particular attention has been given to the provisions of the regulations, and the following samples have been examined by the Public Analyst for the presence of preservative :—

Samples of milk	1,384
Samples of other foodstuffs	492
Samples of foodstuffs specially submitted	304

Three samples of sausages were found to contain sulphur dioxide within the limit prescribed by the regulations, but in two cases the preservative was not declared, and in the other case the printing on the label was smaller than the required size. The offenders were cautioned.

Analysis of a sample of ground ginger disclosed the addition of sulphur dioxide. Legal proceedings were instituted and a fine of £1, with costs 10s. 6d., was imposed.

A sample of cream was found to contain boric acid. The offender was prosecuted and fined 10s., with 10s. 6d. costs.

Several samples of grape juice were found to contain preservative. The extent of the contravention was considered insufficient to warrant further proceedings.

PUBLIC HEALTH (CONDENSED MILK) REGULATIONS, 1923 AND 1927.

PUBLIC HEALTH (DRIED MILK) REGULATIONS, 1923 AND 1927.

Twenty-three samples of condensed milk and 5 samples of dried milk were examined and found to be satisfactory.

Artificial Cream Act, 1929.

The number of registered premises at the end of the year was three, to each of which visits were paid.

Section 8, Food and Drugs (Adulteration) Act, 1928.

Registration of Factories and Wholesale Premises.

(a) Margarine factories—

Number of premises on register	1
--	---

(b) Wholesale dealers in margarine and margarine cheese—

Number of premises on register, 31st December, 1936	108
„ „ registered during 1937	4
„ „ discontinued during 1937	11
„ „ on register, 31st December, 1937	101

(c) Butter factories—

Number of premises on register	2
--	---

Six applications for registration of factories and wholesale premises were received during the year. Four of these related to wholesale dealers in margarine and two concerned butter blending.

In each case reports were submitted to the Committee and the premises were registered.

152 visits were paid to registered premises during the year and no offences were reported.

Notifications of changes in registration were sent to the Ministry of Agriculture and Fisheries.

FOOD PREPARING PREMISES REGISTERED UNDER THE MANCHESTER CORPORATION (GENERAL POWERS) ACT, 1930.

The number of premises on the register at the end of the year was 472, at which the following foods are prepared :—

Sausages	238
Potted meat and brawn	174
Roast and boiled ham	128
Pressed, pickled, cooked, etc., beef and tongue	83
Roast pork	32
Bacon	8
Boiled crabs and lobsters	11
Fish paste	17
Pickled fish	3
Pickled onions	1

901 inspections were made during the year, and the premises were found to be satisfactory, with a few exceptions.

On 14 occasions the inspectors cautioned the occupiers with regard to dirty conditions. On subsequent inspections the premises were reported to have been cleansed.

At seven premises changes of occupier occurred during the year, and certificates of registration were transferred accordingly.

Food preparation was discontinued in 23 instances and the premises were removed from the register.

Thirteen new applications for registration were received and reports thereon with regard to structural conditions, cleanliness, etc., were submitted to the Public Health Committee. In eight cases the premises were reported to be satisfactory and certificates were granted. In another instance registration was granted after the premises had been made to conform to the requisite standard of fitness. In two cases the premises were unsatisfactory and registration was refused. The remaining two applications were withdrawn.

With regard to six cases which were shown as adjourned at the end of 1936, three have been registered, two have been withdrawn, and one case is still outstanding.

DETAILS OF APPLICATIONS RECEIVED.

Nature of Business	Applications for registration	Reported satisfactory and certificates granted	Registered after necessary requirements fulfilled	Registration refused	Adjourned	Withdrawn
Sausages	2	2	—	—	—	—
Sausages and Cooked Meat	1	—	—	—	—	1
Salmon Paste, Potted Meat, and Brawn	1	—	1	—	—	—
Roast Beef and Ham	1	1	—	—	—	—
Cooked Hams	3	2	—	—	—	1
Cooked Meats	1	1	—	—	—	—
Pressed Meat	1	—	—	1	—	—
Potted Meat	2	1	—	1	—	—
Meat and Fish Pastes	1	1	—	—	—	—
Totals	13	8	1	2	—	*2

* Both these premises were found to be factories.

BAKEHOUSES.

There are 599 bakehouses in the city, of which 575 are above ground and 24 underground.

Of the underground bakehouses, nine are in use.

With a view to ensuring that food is prepared under clean and hygienic conditions, close supervision of bakehouses has been undertaken during the year, involving 4,113 inspections.

It was not found necessary to institute legal proceedings in connection with bakehouses during 1937, but the Public Health Committee cautioned two occupiers whose bakehouses had been reported to be dirty.

Number of inspections during 1937	4,113
Number on register at end of 1936	647
Number registered during the year	19
Number removed from the register during the year	67
Number on register at the end of 1937	599
Sanitary defects remedied, after cautions (includes one from 1936)	13
Notices served for sanitary defects	4
Notices complied with (sanitary defects)	3
Dirty conditions remedied after caution (includes one from 1936)	62
Cautions by Public Health Committee for dirty bakehouses.	2
Cautions to cleanse given and work outstanding at end of the year	2
Applications for registration of new bakehouses	12
Applications approved subject to the fulfilment of the requirements of the Medical Officer of Health	11
Applications refused on the ground of unfitness	Nil
Applications withdrawn	1
Changes of occupier recorded	30

In accordance with arrangements with the Town Planning and Buildings Department, plans of four bakehouses were submitted to the Medical Officer of Health and were recommended for approval, subject to the fulfilment of certain requirements.

SALE OF BREAD.

The conditions under which bread is sold by retail have continued to receive the attention of the department during the year.

997 visits were made to shops to ascertain whether this commodity is sold under clean and generally satisfactory conditions.

The visits related to 697 shops, as follows :—

Selling wrapped bread	457
Selling unwrapped bread	93
Selling both wrapped and unwrapped bread	147

This indicates that at 66 per cent. of the shops visited all bread is sold wrapped ; at 21 per cent. of the shops wrapped and unwrapped bread is sold ; and at only 13 per cent. of the shops is the whole of the bread sold unwrapped.

Verbal cautions were given by the inspectors in six cases where dirty conditions existed in contravention of section 72 of the Public Health Act, 1925.

In each case the dirty walls, floors, etc., were found to have been cleansed on subsequent inspection.

RESTAURANT AND CAFE KITCHENS.

At the 31st December, 1937, there were 271 restaurant and cafe kitchens recorded in the department.

563 inspections were made during the year by male and female sanitary inspectors.

The premises were found to be clean and satisfactory with the following exceptions, in connection with which verbal cautions were given :—

Unsatisfactory Conditions Reported	Premises	Result of Action Taken
Dirty	6	All cleansed.
Unsuitable or defective water-closet accommodation	1	Remedied.
Defective walls, floors, etc.	2	Repaired.

Satisfactory ventilation has been provided at one restaurant where unsatisfactory conditions were reported during 1936, and where the work was outstanding at the end of the year.

It was not found necessary to serve any notices during the year.

In previous Annual Reports the inadequacy of existing legislation to prescribe essential standards for premises of this class has been stressed, and it is hoped that additional powers will be available when the Draft Food and Drugs Bill becomes law.

BUTCHERS' SHOPS AND BACON STORES.

616 inspections of these premises were made during the year in connection with the provisions of the Public Health (Meat) Regulations, 1924 and 1935, which require meat to be protected from contamination by dirt, flies, etc.

Whilst the premises were found to be satisfactory generally, in 22 instances it was necessary for the inspectors to caution the occupiers.

These were all complied with, and on no occasion was it necessary to institute legal proceedings.

SALE OF FOOD AT OPEN MARKETS.

The conditions under which food is sold at the 10 market grounds in the city are controlled by bye-laws made in accordance with the provisions of Section 70 of the Manchester Corporation Act, 1934, which are administered by the Public Health Committee in conjunction with the Town Planning and Buildings Committee.

These bye-laws, the text of which was reproduced *in extenso* in the Annual Report for 1936, came into operation on the 1st May, 1937, and copies have been served on all owners of market grounds and upon all stallholders vending food.

The number of stalls concerned was 170, providing employment for 880 persons of both sexes.

133 visits were paid to markets during the year, and the following general conditions were found :—

Surface of Site	Drainage of Site	Water-closet Accommodation	Washing Facilities
Earth surface .. 7	Unsatisfactory 7	Inadequate .. 6	None provided. 6
Concrete or Asphalte, etc. 3	Satisfactory .. 3	Adequate .. 4	Satisfactory .. 4

At one open market the surface had been drained and concreted.

In connection with two other markets the Corporation have approved plans submitted by the owner which include the provision of sanitary accommodation, washing facilities, and draining and concreting of the site.

At another market the sale of food has been discontinued, thereby removing the premises from the ambit of the bye-laws.

The situation of, and conditions existing at, another market were most unsatisfactory. The market was held on a narrow strip of land between two long terraces of houses. The stalls—many of which were fixtures and badly dilapidated—were packed close together. The surface was unpaved and inadequately drained. Washing facilities were absent and the closet accommodation inadequate. The case was referred to the Town Planning and Buildings Committee, who, acting under the powers conferred by Section 18, Manchester Corporation Act, 1891, ordered the structures to be removed. An appeal by the owner to the Ministry of Health was disallowed.

SALE OF BEER IN HOTELS, PUBLIC HOUSES, ETC.

1,896 visits were paid to 827 licensed premises in the city during the year in order to ascertain the conditions under which beer is kept and sold.

At 500 of these premises defective conditions were reported, the remainder being considered reasonably satisfactory.

In many instances unsuitable facilities for washing drinking vessels were found.

In no case did the inspectors report the presence of means for complete sterilisation: in 60 instances there was no constant supply of hot water in the serving bar for the washing of drinking vessels, and in three instances there was no water supply, either hot or cold, and no sink in the bar.

At 32 licensed houses glasses were found which were lip-marked and stained, but improvement in this condition was noted on subsequent inspection.

It was found that the existing facilities for cleansing glasses generally comprised hot and cold water taps to a copper sink with a metal-lined drainer, the hot water supply being in connection with the domestic hot-water circulatory system or a central heating arrangement.

In other instances where such a supply was not provided, gas-heated urns, primarily intended for the supply of hot water for use in connection with the sale of spirits, were relied upon.

The amount of hot water available in this manner is limited to the capacity of the urn—usually about six quarts—and as considerable time is required to attain a reasonable temperature, the supply cannot be adequate during busy periods.

Only occasionally was any detergent such as soap powder used, and then only at infrequent intervals. A little soda was sometimes used in the final washing of glasses at night or at week-ends, but numerous licensees contended that the use of soda rendered flat the beer which was subsequently supplied in the glasses. In several houses this objection was overcome by a preliminary rinse in clear water before drying.

The cleaning of glasses was generally effected by rinsing in hot water, a “glass mop” being used occasionally, followed by draining, drying, and polishing with a linen towel. In a few instances it was admitted that drying was omitted during busy periods, but this practice, together with that of refilling a glass for the same customer, without cleansing, was generally deprecated by the trade.

The 60 cases of unsatisfactory hot-water facilities reported were dealt with as follows :—

Action Taken	Complied with
Verbal requests to tenant 12	12
Letters sent to tenants.. .. . 34	22
Letters sent to brewery companies 11	8
Awaiting reconstruction of premises 2	—
Situate in clearance area 1	—
Totals 60	42

In addition to the unsuitable facilities for cleansing glasses, a number of undesirable conditions were found with regard to the use of “distributors,” general cleanliness, and structural repair.

“Distributors” were in use at 568 premises. In 80 cases these were found to be dirty. Upon revisiting, the inspectors found that in eight instances the “distributors” had been discarded and in 72 cases they had been cleansed.

The other conditions found mainly related to dirty serving bars, dirty beer pumps, pipes, and filters, dirty or defective walls, floors, and ceilings of cellars, waste beer (drippings, overflows, and “ bottoms ” from barrels) collected for subsequent sale and exposed to contamination, also defective sinks and sink waste-pipes in serving bars, viz. :—

SUMMARY OF THE UNSATISFACTORY CONDITIONS IN
500 LICENSED PREMISES.

	Number of Cases Found	Number of Cases Work Done
CLEANLINESS—		
“ Distributors ” found to be dirty	80	80
Serving bars dirty	57	56
Drinking vessels lip-marked, stained.. .. .	32	32
Sinks slimy, dirty	11	11
Absence of a constant supply of hot water in the serving bar for the washing of drinking vessels	60	42
Absence of any water supply or sink in the serving bar	3	—
Beer pumps—yeast moulds, dirty external surfaces	111	108
Beer pipes—verdigris, dirty external surfaces ..	99	97
Beer filters—slimy, dirty	65	62
Cellars—dirty walls, ceilings, floors, window areas	296	292
Waste beer (tap drippings, overflow from the filling of glasses, “ bottoms ” from barrels, etc.) collected for subsequent sale, and exposed to contamination (In all instances the licensees claimed that beer dregs from glasses, etc., were thrown away.)	65	62
Vermin	30	26
STRUCTURE—		
Cellars.		
Defective walls (broken surfaces, etc.) ..	36	36
Defective floors (broken, sunken flags, etc.) .	111	107
Defective ceilings (broken plaster, etc.) ..	57	54
Defective drains	10	9

Summary of the Unsatisfactory Conditions in 500 Licensed Premises—
continued

	Number of Cases Found	Number of Cases Work Done
SERVING BARS—		
Broken floors	15	10
Defective sinks, drainers, troughs (broken, badly-worn metal lining)	74	68
Sink waste-pipes untrapped	130	116

These defects were dealt with as follows :—

Letters sent to tenants	190 premises.
Letters sent to brewery companies	167 „
Letters sent to owners other than brewery companies.	6 „
Verbal requests	237

At the end of 1937, 44 cases were outstanding, in each of which some work has been done and further communications have been sent to the responsible brewery or tenants.

HOUSING ACTIVITIES.

The number of new houses completed in the City during 1937 was 3,699, of which 1,743 have been erected by the local authority and 1,956 by private enterprise.

Occupied houses (excluding tenement dwellings) on the Corporation Estates at the end of the year numbered 26,628. This figure includes 150 cottages built over 23 years ago at Blackley.

There were in addition 601 occupied flats.

The number of tenement dwellings owned by the Corporation is 803.

HOUSE INSPECTION.

Housing Act, 1936, and Housing Consolidated Regulations.

Systematic inspection of dwelling-houses under the above Act and regulations has been continued throughout the year.

5,674 houses were inspected and have been classified as follows :—

Unfit for habitation	5,528
Minor defects	9
No defects recorded	137

Details of these inspections are given in Tables A, B, and C (see page 385).

Under Public Health Acts and Local Acts.

Primary inspections have been made at 15,046 houses, principally as a result of complaints or investigation of cases of infectious disease. The defects found have been dealt with as follows :—

(a) At 5,254 houses defects have been remedied after the issue of letters or preliminary notices.

(b) At 3,961 houses the defects have been dealt with by the service of statutory notices under the Public Health or Local Acts and remedy effected by the owners in 3,655 cases and by the local authority in default in 187 cases.

Total Number of House Inspections.

The total number of house inspections (including revisits) during the year for all purposes was 106,931.

A summarised analysis of these figures is to be found in Table D, page 388 and Table 4, page 428.

Defective Houses on list for consideration of Committee.

The reconditioning of many thousands of houses in the City is impracticable. These houses will be dealt with eventually under the Housing Act, 1936.

Defects of an urgent character arise at such houses, however, which require immediate attention, such as choked drains, leaky roofs, defective floors and yard surfaces, etc.

Preliminary notices or intimations were sent to the owners regarding urgent defects at 2,774 houses and the work was effected at 2,619 houses.

Statutory notices were necessary in connection with urgent defects at 495 houses and work was reported to have been carried out at 500 houses, this latter figure including a few cases outstanding at the end of 1936.

CLEANSING OF HOUSES AND APPURTENANCES.

Dirty or verminous conditions in dwelling-houses are dealt with by the issue of verbal cautions or the service of notices on the tenants.

In 147 of such cases, houses were cleansed as a result of verbal cautions by the inspectors, and 3 cautionary letters were complied with.

Twenty-five statutory notices were served and 26 notices were reported to have been complied with, including some served during the previous year.

In three instances it was necessary to report the occupiers of dwelling-houses to the Committee for failing to comply with notices to cleanse and legal proceedings were ordered to be instituted. In one case the necessary work was done before the issue of the summons. Two offenders were summoned, Magistrates' orders being granted in each case, with costs amounting to 13s.

Arrangements have been made by the Public Health Committee whereby poor persons can obtain lime for limewashing free, on the certificate of the district sanitary inspector or health visitor, and may borrow brushes for the purpose without charge.

During the year, 1,356 such certificates were issued, 1,637 brushes were loaned and 19,260lbs. of lime were distributed.

HOUSES LET-IN-LODGINGS.

These dwellings, which include the type known as "farmed-out" houses, have continued to receive the attention of the department with a view to the conditions being maintained as satisfactory as possible and that the byelaws which control them are being observed.

The new draft byelaws, to which reference has been made in previous annual reports, are awaiting confirmation by the Minister of Health.

The number of registered houses let in lodgings is 1,413, including 473 "farmed-out" houses.

During the year 10,497 day inspections and 5 night inspections were made.

In 120 instances, infringements of the byelaws have been remedied as a result of verbal cautions by the inspectors.

It has been necessary to serve statutory notices in the following cases :—

Requirements	Notices served	*Notices complied with
	Houses	Houses
To furnish particulars preliminary to registration..	202	212
To provide water supply and sinks	15	23
To cleanse walls and ceilings ("farmed" houses) ..	74	81
To provide ventilation to rooms, staircases, or passages	5	12
To provide washing accommodation	4	2
Totals	300	330

* Includes some notices outstanding in 1936.

Thirty-nine offences against the byelaws were reported to the Committee.

Details of these offences and subsequent action are given in the following table :—

Houses Let-in-Lodgings—Offences Reported to Committee.

OFFENCE	COMMITTEE PROCEEDINGS			
	Number Reported	Ordered to be Sum-moned	Work done before issue of Summons	Cautioned or Excused
Failing to furnish particulars.. ..	11	11	11	—
Dirty walls, floors, or bedding.. ..	13	13	13	—
Non-compliance with notices to provide water supply and sinks	12	12	12	—
Non-compliance with notices to provide adequate means of ventilation	3	3	3	—
Totals	39	39	39	—

MUNICIPAL HOSTELS.

“Walton House” Municipal Hostel for Men.

This hostel was opened in 1899 and is situated in Harrison Street, Ancoats, within easy reach of the City.

Accommodation is provided for 465 men in separate cubicles. Each cubicle is separately ventilated to the external air and contains a comfortable bed with an ample supply of bedding.

Smoke, Reading, and Dining rooms are situated upon the ground floor. The Catering Department adjoins the dining room, from which food, etc., and prepared meals can be obtained at moderate charges.

The hostel continues to be well patronised and during the year ended 31st March, 1938, the average number of men accommodated per night was 447.

The charges are 1s. per night or 6/6d. per week.

“Ashton House” Municipal Hostel for Women.

Similar facilities to those at the men's hostel are provided at this hostel which was opened in 1910. It is situated in Corporation Street upon the fringe of the City.

The charges are 10d. and 1s. per night or 5s. and 6s. if booked weekly.

There is accommodation for 210 women but the average number of beds occupied per night during the year ended 31st March, 1938, was 95. This is a slight improvement upon the previous year but there appears to be a dearth of women who desire to make the hostel their permanent home. The hostel is slowly gaining a good reputation particularly among domestic and hotel workers who have found it a boon during the winter season.

The year 1937 was marked by the passing of Miss Margaret Ashton who was a pioneer in social services for women. Ashton House stands as a tribute to her endeavours and her name is perpetually associated with the building.

CARAVAN DWELLINGS.

361 inspections of these dwellings and their sites were made during the year with a view to the prevention of nuisance and compliance generally with the byelaws made under section 9 of the Housing of the Working Classes Act, 1885.

The existence of 27 new caravans was reported during 1937 and in each case the occupiers were served with a copy of the byelaws.

18 caravans were reported to have removed and the total number of such structures in the City at the 31st December, 1937, was 92. The number of persons accommodated in these vans was 238.

This type of housing can be divided into two groups, viz. :—

(a) Structures occupied by nomads such as travelling showmen, who remain on the sites for short periods.

(b) Structures used as permanent dwellings and which remain in position for relatively long periods.

Mention was made in the Annual Reports for 1935 and 1936 of the difficulties in dealing with this problem, when it was suggested that in the case of group (a) it appeared reasonable to allow bona-fide showmen to remain on suitable sites for short periods, provided that certain essential requirements with regard to sanitation, etc., were fulfilled. With regard to group (b) the application of the Housing Acts to these structures was discussed.

Consolidation of the law with respect to caravans came into effect on the 1st October, 1937, by the provisions of sections 268 and 269 of the Public Health Act, 1936.

Section 269 enables local authorities to grant licences authorising persons to allow land occupied by them to be used as sites for movable dwellings and licences authorising persons to erect and use such dwellings and may attach such conditions to the respective licences as may be appropriate.

Section 18 of the Manchester Corporation Act, 1891, contains somewhat similar powers. This section, which is administered by the Town Planning and Buildings Committee, enables the Corporation to proceed against any person who sets up or erects any structure or erection of a temporary or movable character *without having first obtained a licence from the Corporation*. Any tent remaining for less than seven days is exempted. An offender is liable to a penalty not exceeding five pounds and to a daily penalty not exceeding forty shillings.

All the structures concerned in the City have been set up without such licences, and, with a view to action by the Town Planning and Buildings Committee, reports on each case have been sent to the City Architect.

RENT RESTRICTION ACTS.

No reports were submitted to the Public Health Committee during the year in connection with houses not in a reasonable state of repair, as the only application received was subsequently withdrawn.

WORK DONE BY THE DISTRICT SANITARY INSPECTORS IN CONNECTION WITH INFECTIOUS DISEASE.

Infectious cases investigated	4,883
Primary visits to infected houses	4,876
Subsequent visits to infected houses	4,154
Inspections <i>re</i> tuberculosis	11,389
Other visits <i>re</i> tuberculosis	4,558
Visits to contacts :—	
Smallpox	31
Scarlet fever	120
Diphtheria	108
Other contacts	44
	— 303
Rooms fumigated by Inspectors	3,789
Hospital ward fumigated by Inspectors	1
Rooms disinfected by Corporation workmen ..	1,400
Rooms disinfected by tenants	3,431

TABLES SHOWING RESULTS OF HOUSE-TO-HOUSE INSPECTIONS.

TABLE A.

Number of Houses Inspected	Number of Rooms per House								Part Business Premises
	1	2	3	4	5	6	7	Over 7	
5,674	..	62	565	2,729	1,291	641	237	149	361

TABLE B.

WARDS	Number of Houses Inspected	Want of Cleanliness	In-adequate Light	In-adequate Ventilation	Dampness	Without proper accommodation for		Disrepair	Bad Arrangement	No Defects Recorded	Minor Defects	CLASSIFICATION	
						Food Store	Domestic Washing					Remediable without reconstruction	Unfit
													Irre-medi-able without recon-struction
All Saints	88	1	88	88	—	86	19	87	88	—	—	—	88
Ardwick	400	—	91	100	227	388	71	393	312	—	—	204	196
Beswick	94	—	—	—	3	94	—	71	—	—	—	94	—
Blackley	323	7	44	42	86	323	17	217	52	—	—	274	49
Bradford	621	2	42	161	287	621	61	606	331	—	—	375	246
Cheetham	379	—	88	105	105	379	60	374	149	—	—	282	97
Chorlton-cum-Hardy	430	8	32	131	140	398	43	407	138	14	—	416	—
Gorton North	197	—	—	4	71	155	12	167	—	33	1	163	—
Gorton South	296	—	9	14	136	296	42	295	—	—	—	293	3
Harpurhey	79	—	—	—	2	79	—	38	—	—	—	79	—
Levenshulme	186	5	—	—	117	179	6	185	22	—	—	168	18
Longsight	114	—	16	—	2	113	7	34	—	1	—	113	—
Medlock	49	—	46	46	46	49	3	49	49	—	—	—	49
Miles Platting	329	—	93	91	105	329	84	328	146	—	—	241	88
Moss Side East	273	9	272	272	229	273	—	273	273	—	—	—	273
Moss Side West	247	7	62	141	124	244	50	245	215	—	—	212	35
Moston	172	—	—	1	18	169	—	57	—	2	1	169	—
Newton Heath	164	1	62	60	51	164	13	64	117	—	—	98	66
Openshaw	53	—	5	5	11	53	—	42	—	—	—	53	—
Rusholme	202	—	—	—	5	202	49	173	—	—	—	202	—
St. George's	280	1	248	279	247	279	95	279	276	—	1	1	278
St. Luke's	342	4	102	160	92	318	39	335	307	—	—	130	212
St. Mark's	172	1	4	96	167	172	25	172	172	—	—	2	170
Wythenshawe	184	1	22	59	69	59	6	77	2	87	6	85	6
Totals	5,674	47	1,326	1,855	2,340	5,422	702	4,968	2,649	137	9	3,654	1,874

TABLE C.

Number of Rooms per House	Number of Individuals per House			Number of Individuals per Room			Number of Children under 10 years per House			Overcrowding	
	Houses	Population	Individuals per House	Rooms	Population	Individuals per Room	Houses	Children under 10	Children per House	Manchester Standard	Housing Act. 1936 Standard
1	—	—	—	—	—	—	—	—	—	—	—
2	62	138	2.22	124	138	.89	62	16	.25	6	1
3	565	1,723	3.04	1,695	1,723	1.01	565	307	.54	51	20
4	2,729	8,367	3.06	10,916	8,367	.76	2,729	1,272	.46	155	7
5	1,291	4,463	3.45	6,455	4,463	.69	1,291	547	.42	17	—
6	641	2,501	3.9	3,846	2,501	.65	641	307	.47	11	—
7	237	1,008	4.25	1,659	1,008	.67	237	141	.59	—	—
Over 7	149	671	4.50	—	671	—	149	66	.44	—	—
Totals . .	5,674	18,871	3.32	24,695	18,871	.76	5,674	2,656	.46	240	28

TABLE D.
HOUSING CONDITIONS—YEAR ENDED 31ST DECEMBER, 1937—IN THE
FORM REQUIRED BY THE MINISTER OF HEALTH.

General Statistics.

1. *Inspection of Dwelling-houses during the Year.*

(1) (a) Total number of dwelling-houses inspected for housing defects (Public Health or Housing Acts)	20,682
(b) Number of inspections made for the purpose ..	91,683
(2) (a) Number of dwelling-houses (included under sub-head (1) above) which were inspected and recorded under the Housing Consolidated Regulations, 1925 to 1932	5,674
(b) Number of inspections made for the purpose ..	21,119
(3) Number of dwelling-houses found to be in a state so dangerous or prejudicial to health as to be unfit for human habitation	5,528
(4) Number of dwelling-houses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation	9

2. *Remedy of Defects during the Year without Service of Formal Notices.*

Number of defective dwelling-houses repaired in consequence of informal action by the local authority or their officers	5,254
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3. *Action taken under Statutory Powers during the Year.*

(A) *Proceedings under sections 9, 10, and 16 of the Housing Act, 1936 :—*

(1) Number of dwelling-houses in respect of which notices were served requiring repairs	—
(2) Number of dwelling-houses in which defects were remedied after service of formal notices :—	
(a) By owners	—
(b) By local authority in default of owners.	—

(B) *Proceedings under Public Health Acts :—*

(1) Number of dwelling-houses in respect of which notices were served requiring defects to be remedied	3,961
(2) Number of dwelling-houses in which defects were remedied after service of formal notices— :	
(a) By owners	3,655
(b) By local authority in default of owners.	187

(c) *Proceedings under sections 11 and 13 of the Housing Act, 1936 :—*

(1) Number of dwelling-houses in respect of which demolition orders were made	23
(2) Number of dwelling-houses demolished in pursuance of demolition orders	31

(D) *Proceedings under section 12 of the Housing Act, 1936 :—*

(1) Number of separate tenements or underground rooms in respect of which closing orders were made	—
(2) Number of separate tenements or underground rooms in respect of which closing orders were determined, the tenement or room having been rendered fit	—

WATER SUPPLIES.

Practically the whole of the houses in the City are supplied with water from the town's mains. Exceptions occur in Crumpsall, where two cottages are supplied from a spring and a number of houses in the outlying portions of Wythenshawe, where water is obtained from wells.

It is the practice of the department to obtain samples of town's water from house taps, not only on receipt of complaints but as a routine measure. The bacteriological and chemical results of analysis are communicated to the Waterworks Department.

The following samples of town's water were taken during 1937 :—

For bacteriological examination	61
For chemical examination	60

Regular routine sampling of the water supply of the city is undertaken by the Waterworks Department and the results of analysis forwarded to the Medical Officer of Health.

Reports were referred to the Waterworks Department with regard to 56 houses where the pressure of water was inadequate.

The water from two wells supplying two houses was analysed during the year and was reported to be satisfactory.

Seven wells supplying nine houses in Wythenshawe have been closed during the year and town's water laid on.

Since the inclusion of Wythenshawe within the City in April, 1931, samples of water have been obtained from all the known wells in the district and submitted for analysis. These wells originally numbered 91 and supplied 145 houses.

Nine wells supplying 10 houses were considered to be satisfactory at the time and 82 wells supplying 135 houses were contaminated.

Fifty-eight wells supplying 91 houses have since been closed and town's water laid on to the houses, in addition to one house which was without a supply.

The water of 28 wells supplying 48 houses is still considered to be unsatisfactory. In these cases the City Surveyor has been furnished with information with a view to statutory action where possible.

In many instances the installation of town's water would prove costly owing to the distance away of the nearest service main, but as a precautionary measure pending the provision of a pure supply, the users of contaminated well water have been advised to boil all water for domestic purposes.

The Water Engineer has kindly supplied the following information with regard to lengths of water mains laid in Wythenshawe since incorporation :—

	Baguley	Northenden	Northen Etchells	Total
	Yards	Yards	Yards	Yards
Prior to 31st March, 1937 ..	12,875	17,604	48,109	78,588
Year ending 31st December, 1937	721	673	6,761	8,155
Totals	13,596	18,271	54,870	86,743

SURVEILLANCE OF RIVERS AND STREAMS.

I am indebted to the Secretary of the Rivers Department of the Corporation for the following statement regarding action taken to prevent pollution of rivers and streams :—

“ The circumstances detailed in the last Report regarding the control and surveillance of rivers and streams in the City remain unchanged, the over-riding rivers authority, the Rivers Mersey and Irwell Joint Committee, continuing to deal with all matters of pollution, and the Rivers Department of the Corporation with obstructions, buildings on river walls, culverts, river banks, encroachment on river lines and the control of weirs and similar devices. The liaison work previously described between the Rivers Department and the Joint Committee, and between the Medical Officer of Health, the Chief Sanitary Inspector, and the Rivers Department, has been continued during the year under review with satisfactory results to all concerned,

“ During the year the surveillance of streams has been continuous and a number of minor offences have been dealt with. These offences are due more to the indifference of the local residents than to the default of riparian owners. The streams of the city provide a readily available means for the disposal of unwanted household rubbish, organic and inorganic, and inasmuch as offenders are always careful to dispose of their material clandestinely, it is seldom possible to catch offenders. When cases are taken to Court, moreover, offenders are usually given the benefit of The Probation of Offenders Act, and the proceedings are apparently not considered worthy of publicity in the local press. A little publicity in this regard would be very helpful to the Rivers Department. On several occasions during the year riparian owners who have not themselves been responsible for the disfigurement of streams, have been called upon under the powers of the Corporation to improve matters, and have done so willingly enough but mostly under protest as not being the actual offenders.

“ The result has seldom been satisfactory. In a few days' time the untidy conditions have recurred and the labour expended has been futile.

“ In the case of the Corn Brook at Gorton, particularly referred to in the last Report, the Rivers Department has continued to keep the bed of the stream clear of debris at the cost of the riparian owners in accordance with the agreement reached with them after much negotiation. Here again the response to the efforts of the Corporation has not been encouraging. It was thought that the local residents would appreciate the fact that something was being done at the expense of perfectly innocent riparian owners to make their stream more pleasant to look upon. But the efforts of the Department have been largely unavailing ; no sooner is the brook cleared than it is charged again with domestic debris which can only come from the nearby house property.

“ As a set-off against this unfortunate state of affairs, it is pleasing to record that the River Medlock has never been in better condition, nor more free from obstructions, than during the year 1937. In the few cases in which the Department has had to make complaint no difficulty has been experienced in obtaining compliance with the Law. A few complaints of unpleasant smells have been received ; these, however, have not been found to be due to any local cause, but to causes arising upstream of the City. It is on matters of this nature that the liaison work with the Rivers Mersey and Irwell Joint Committee proves beneficial.

“The passing of the Public Health (Drainage of Trade Premises) Act, 1937, will affect very materially the future condition of many of the smaller streams of the City. The Act, which comes into force on the 1st July, 1938, has considerable bearing on the relationship between the Corporation and traders generally in connection with the discharge of trade effluents into the City Sewers imposing new responsibilities upon the Corporation and traders alike.

“The intention of the Act appears to be to reduce the number of points at which trade effluents are discharged into the water courses, and to concentrate the discharge of those trade effluents at sewage works for adequate treatment by local authorities. Whether the passing of the Act will encourage traders who are now discharging their works effluents into the streams, to transfer to the public sewers, remains to be seen. While it is clear that trade effluents are generally undesirable additions to a stream it must be remembered that in the smaller watercourses the trade effluents constitute a considerable proportion of the dry-weather flow of the stream and the diversion of such a large proportion of the fluid-flow might conceivably result in trouble in other directions.”

DRAINAGE DEFECTS AND REPAIRS TO SURFACES TO YARDS AND PASSAGES.

Important changes in the law relating to drainage took place on the 1st October, 1937, when the Public Health Act, 1936, became effective.

By Sections 18, 20, and 24 of the Act, further responsibilities were placed on local authorities with respect to sewers.

Section 18 provides for a declaration of adoption by the local authority of drains or sewers about to be constructed or under construction.

In addition to sewers which were vested in the local authority before the commencement of the Act, all combined drains are now similarly vested by virtue of Section 20. This provision includes a large number of drains constructed in Manchester under “grouped drainage agreements,” in which several premises are drained by a common conduit.

It is the duty of the local authority to maintain, cleanse, and empty all public sewers vested in them and they are enabled by the provisions of Section 24 to recover expenses incurred in carrying out maintenance work, including repair and renewal.

Notice of intention to carry out such work is to be given to the respective owners concerned and representations by owners with regard to the work are to be considered by the local authority within 7 days. Where the local authority is of the opinion that immediate action is necessary, the work may be commenced without notice.

Defects in private sewers and drains are covered by the provisions of Section 39 of the Act and administration of this Section is effected by the service of either informal or statutory notices.

During 1937 the reconstruction, repair or provision of drains at 14 premises has been effected as a result of informal action (see Table 5, page 429) and as a result of statutory notices under the Public Health Acts or similar provisions of Local Acts, drainage work has been carried out at 1,063 premises (see Table 6, page 430).

As a result of informal action repairs have been carried out to surfaces of yards and passages in connection with 150 premises (see Table 5, page 429) and in connection with 1,383 premises after service of statutory notices under the Public Health or Local Acts (see Table 6, page 430).

The District Sanitary Inspectors supervise work effected by owners' contractors and in cases of default or at owner's request the work is executed by the drainage branch of the department, the recoverable costs being charged to the owner.

During the year the drainage branch carried out such work at 922 premises at a cost of £4,348 14s. 8d.

Drains which had been reconstructed, repaired or provided and drains of new buildings (other than those on Corporation Housing Estates) which were subjected to the water test by officials of the Public Health Department, numbered, 5,757.

The provisions of Section 31 of the Manchester Corporation (General Powers) Act, 1930, and Section 41 of the Public Health Act, 1936, enable the Corporation to proceed against persons carrying out repairs or covering drains without giving notice to the Corporation to enable the drains to be inspected and tested.

Twelve offences were reported during 1937. Cautionary letters were sent in each case, resulting in the drains being exposed for inspection and testing.

As a result of co-operation between the Public Health and Highways Committees with regard to the abolition of cesspools in Wythenshawe, 9 such cesspools have been removed and the drainage of 11 houses concerned reconstructed and connected to public sewers.

CLOSET ACCOMMODATION.

During the year 60 pail closets and 7 privies were demolished or converted to waterclosets.

The present closet accommodation in the City is as follows :—

Water closets	..	285,038	
Slop water closets		30	(including 1 in Wythenshawe).
Pail closets	.. ..	779	(including 286 in Wythenshawe and 13 in clearance areas).
Privies	.. .. .	230	(including 199 in Wythenshawe).

The pail closets and privies generally are in situations where sewers are not available.

SEWERAGE AND SEWAGE DISPOSAL.

Main Drainage.

The City Engineer has kindly furnished the following information :—

During the year a relief sewer was constructed to prevent flooding in the Burnage district, particularly in the neighbourhood of the Duchess of York's Hospital for Babies in Burnage Lane. This sewer varies in size from 2ft. 9ins. to 15ins. in diameter. The total length is 1,500 yards and the cost was £11,540.

Sewage Disposal.

The following statement is available through the courtesy of Mr. William Porthouse, Secretary of the Rivers Department :—

During the year 1937 constructional work was commenced on the two additional rectangular linear flow preliminary sedimentation tanks at the Davyhulme Sewage Works referred to in the last report, and is proceeding rapidly as these notes are being written (February, 1938).

The construction of the sludge digestion plant, which has been installed to deal with 2,000 tons of sewage sludge per week, was completed during the year, and so far every satisfaction has been obtained from the plant. The gases of fermentation are stored in a floating gas-holder, and are burned in a Cochrane boiler to provide energy for the pre-heating of the incoming sludge and the maintenance of an optimum temperature in the covered digestion tanks. An operational diagram of this interesting and economical arrangement appears in the annual report of the Rivers Department for the year ended 31st March, 1937, together with a detailed description of the plant.

The preparation of the detailed drawings of the proposed additional activated sludge units at the Davyhulme Sewage Works has proceeded without interruption, but at the end of the year preliminary work was not sufficiently advanced to warrant provision being made for constructional work during the financial year beginning 1st April, 1938. The extensions are being designed to provide full and efficient treatment for the total flow of sewage received at the Davyhulme Works, including commitments regarding the sewage to be received from numerous outside authorities under agreements entered into by the Corporation. In this regard it may be pointed out that, in pursuance of the policy of the Corporation to accept into the City sewers, wherever practicable, the sewage from outside authorities, on agreed terms, arrangements have been concluded during the year with the Droylsden Urban District Council for the treatment by Manchester of the sewage of the Urban District, and also with the Cheadle and Gatley Urban District Council, whereby the sewage of the North Cheshire district of Bramhall, Poynton, and Woodford will in future be taken by Manchester by way of the Cheadle sewerage system, for treatment at the Davyhulme Sewage Works.

SANITARY CONVENIENCES AT PARKS, CEMETERIES, AND OPEN SPACES.

These conveniences have been regularly inspected with a view to the maintenance of cleanliness and freedom from nuisance, involving 1,763 inspections.

In 22 cases defects were reported such as choked drains, broken closet seats, defective flushing arrangements, dirty conditions, etc.

All these defects were found subsequently to have been remedied after representation to the Parks Department.

A number of improvements in sanitary accommodation at Parks, etc., were effected during 1937, particularly at Moston Cemetery, where new conveniences were erected for females and at Wythenshawe Park, where new conveniences for both sexes were provided.

During the year further conferences were held between members and officials of the Public Health Committee and Parks Committee, with a view to co-ordinated action between the two Committees.

PUBLIC CONVENIENCES.

The total number of conveniences under the control of the department is 146, with accommodation as follows :—

Males.

Urinal, water-closet, washing, and parcels accommodation..	8
Urinal, water-closet, and washing accommodation	6
Urinal and washing accommodation	24
Urinal accommodation	77
Total	115

Females.

Water-closet, washing, and parcels accommodation ..	11
Water-closet and washing accommodation	9
Water-closet accommodation	11
	31

Details of initial costs, working expenses, receipts, etc., are given in Table 8, pages .

Extensions and improvements continue to be effected.

The males convenience in Victoria Street has been reconditioned with the following accommodation :—

Ten water closets, six washbowls, eighteen urinal stalls and parcels accommodation.

The urinal in Sackville Street has been reconditioned and new stalls provided to the urinal in Every Street.

The land forming the site of the urinal adjoining the Wellington Hotel, Moulton Street, Strangeways, being required by the owners for extension to the hotel, a new urinal has been erected in the near vicinity.

A change has been effected in connection with the females convenience at the junction of Rochdale Road and Charlestown Road, Blackley. For many years past it has been let on lease along with the adjoining shop, the lessee being responsible for the cleansing and receiving the income from the use of the convenience.

This arrangement was considered to be unsatisfactory as the standard of cleanliness was below the normal standard of other public conveniences. Upon a change in tenancy during the year the opportunity was taken to let the shop separately and place the convenience under

the direct management of this department. An extension of the grouping system has enabled this to be done without additional labour costs. Not only has improvement been effected as regards cleanliness but the department has benefited financially.

The males' convenience, consisting of one water-closet and two urinal stalls, which adjoins the Transport Department's parcel office in Middleton Road, Crumpsall, has been rented by this department and is now available to the public.

The scheme for the reconstruction of the males convenience in Market Place has been held over as it was considered that the provision of new conveniences at Wythenshawe was more urgent. It is expected that the erection of these conveniences, which will be situate at the junction of Princess Parkway and Wythenshawe Road, will be commenced during 1938.

Plans have been approved by the Public Health Committee for the reconditioning of the urinal under Knott Mill Station Approach in Whitworth Street West. This work will be carried out during 1938.

With regard to the males and females conveniences at Stockport Road, Levenshulme, an agreement for the extension of the tenancy for a further ten years has been entered into with the owners.

Further progress in the provision of conveniences may be expected when the policy which has been adopted by the City Council of erecting dual conveniences on the boundaries of parks and cemeteries is brought into full effect.

SCHOOLS.

Visits made to schools during the year numbered 204 and were mainly with regard to nuisances, drainage work, and closet accommodation.

ATMOSPHERIC POLLUTION.

Smoke Abatement.

Administration of legislation with regard to smoke abatement has received close attention during the year. On the 1st October, 1937, the provisions of Section 91, etc., of the Public Health Act, 1875, and the Public Health (Smoke Abatement) Act, 1926, were replaced by Sections 101—106 of the Public Health Act, 1936.

Four smoke Inspectors are employed for the purpose of observation of industrial chimneys in the City, and their hours of duty are arranged so as to exercise maximum supervision over the chimneys concerned.

Details of their work are shown below :—

Timed observations taken—512.

Revealing black smoke two minutes and over in half-hour periods	90
Revealing black smoke two minutes and over in half-hour periods (chimneys outside the City boundaries) ..	3
Exempted chimneys revealing black smoke two minutes and over in half-hour periods	5
Revealing smoke, other than black, and causing nuisance..	9
Revealing black smoke under two minutes	219
Revealing black smoke under two minutes outside City boundaries	4
Not revealing black smoke (taken upon complaints) ..	177
Revealing smoke other than black but not in such quantity as to be a nuisance.. .. .	5
Total amount of black smoke observed in minutes.. ..	750
Average amount of black smoke observed in minutes (per observation revealing black smoke)	2.39

Observations taken and not included in above.

Locomotives on railways	604
Special reports made	67
Number of complaints received from all sources	73
Number of visits to works <i>re</i> smoke abatement.. .. .	806
Number of premises where inspector recommended plant to be altered, improved, or repaired.. .. .	5
Number of cases where plant was found to be altered, etc., as a result of inspectors' recommendations	4
Number of cases reported to Committee	107
Cases in which no action was taken (exempted chimneys)..	5
Cases cautioned or excused by Committee	30
Statutory notices served.. .. .	38
Magistrates' Orders to abate nuisance obtained.. .. .	2
Prosecutions for smoke nuisances	32
Cases in which penalties were imposed	31
Cases in which legal proceedings were withdrawn	1
Total amount of penalties and costs	£53 16s.
Statutory notices expiring without further action	43
Statutory Orders lapsing for various reasons	9
Approximate number of chimneys	1,567

Of the 38 statutory notices served, six were in respect of "smoke other than black." Seven observations were taken of chimneys outside the City, which resulted in one notice being served and the imposition of a penalty by the Magistrates in another case.

Many cases have occurred of smoke enissions from railway locomotives, but legal proceedings have not been instituted owing to the difficulty of collecting the necessary evidence.

The solution to this problem lies in extended electrification of railway lines. Two lines in the City are electrified at present, Manchester—Bury and Manchester—Altrincham, and it is understood that work on a third (Manchester—Sheffield) is to commence shortly.

Causes to which Smoke Emissions are attributed.

Of the 102 cases reported to the Committee where chimneys (other than exempted chimneys) emitted smoke two minutes or over in the half-hour period, the nuisance was found to be due to the undermentioned causes :—

Bad firing	67
Unsuitable fuel	7
Bad firing and unsuitable fuel	3
Fireman having other duties to perform combined with bad firing	3
Insufficient boiler plant	1
Structural defects in plant	7
Alterations to plant in progress	5
*Accidental causes outside the control of the fireman.. ..	7
Unskilled firemen	1
Causes unknown	1

* Broken Firebars, Mechanical Stoker Defects, etc.

The provisions of the Minister of Transport's regulations under the Road Traffic Act, 1930, with regard to the emission of smoke, grit, ashes, etc., from road locomotives, steam wagons and vehicles with compression ignition engines, and the provisions of the Manchester Police Act, 1844, with respect to the firing of domestic chimneys, are delegated for administrative purposes to the Watch Committee.

By courtesy of the Chief Constable it is learned that during 1937 one prosecution was instituted by the Police Department in respect of a vehicle emitting smoke, and the offender was fined 10s.

The Police Department also conducted 1,241 successful prosecutions with regard to the firing of domestic chimneys, the total amount of fines imposed being £241.

There is no doubt that the Gas and Electricity Departments have contributed materially towards reduction of smoke emission, and I gratefully acknowledge the following statements which have been furnished by the Commercial Manager and Secretary of the Gas Department (Mr. J. H. Cadman) and the Chief Engineer of the Electricity Department (Mr. H. C. Lamb).

Gas Department.

Cookers and grillers in use :—

Year ending 31st March, 1934	.....	184,495	
Do.	1935	.....	187,586
Do.	1936	.....	190,601
Do.	1937	.....	194,768
Do.	1938	.....	198,959
			Increase 1934—1938 14,464.

Fires, radiators, etc., in use :—

Year ending 31st March, 1934	.....	63,619	
Do.	1935	.....	65,118
Do.	1936	.....	67,106
Do.	1937	.....	69,886
Do.	1938	.....	74,059
			Increase 1934—1938 10,440

Gas sold for industrial purposes :—

Year ending 31st March, 1934	..	1,130,456,400 cu. ft.	
Do.	1935	..	1,199,432,300 do.
Do.	1936	..	1,422,986,300 do.
Do.	1937	..	1,718,969,000 do.
Do.	1938	..	1,997,068,000 do.
			Increase 1934—38 866,629,600 cu. ft.

Gas is becoming increasingly popular for central heating, 20 business premises having installed it during the past 12 months.

Electricity Department.

Units of electricity sold (excluding bulk supplies) :—

Year ending 31st March, 1933	.....	331,300,000
Do. 1938	.....	474,600,000

Number of motors connected :—

Year ending 31st March, 1933	.....	46,404
Do. 1938	.....	70,022

Total horse power connected :—

Year ending 31st March, 1933	.....	264,290·7
Do.	1938	..... 302,046·5

Total number of heating and cooking appliances connected :—

Year ending 31st March, 1933	.....	96,219
Do. 1938	.....	192,258

During the 5 years period under review a total of about 1,722 h.p. of engines, representing mainly old and uneconomic private plant, were displaced by electric motors. As half the above-mentioned total comprised steam engines the result is a definite contribution towards decrease of the smoke nuisance.

The work of the Manchester and District Regional Smoke Abatement Committee has continued during the year especially in relation to the classes for the training of stokers and efforts to secure statutory regional administration of the law relating to smoke emission. The report of the Regional Committee appears on page 458.

INVESTIGATION AND MEASUREMENT OF ATMOSPHERIC POLLUTION.

The observations on atmospheric pollution commenced in 1936, in co-operation with the Central Advisory Committee of the Department of Scientific and Industrial Research, have been continued during the year.

Standard soot deposit gauges are installed at seven representative places in the City, viz. :—

Situation	Type of District	Distance and Direction from Centre of City
1. Baguley Sanatorium	Semi-rural	6 $\frac{3}{4}$ miles S.S.W.
2. Booth Hall Hospital	Residential	3 $\frac{1}{2}$ miles N.N.E.
3. Heaton Park	Residential	3 $\frac{3}{4}$ miles N.
4. Oldham Road	Congested and industrial	1 $\frac{1}{4}$ miles N.E.
5. Philips Park	Industrial	2 miles E.N.E.
6. Rusholme	Residential	1 $\frac{3}{4}$ miles S.E.
7. Withington	Residential	3 $\frac{3}{4}$ miles S.

Estimation of sulphur activity by the lead peroxide method is effected by apparatus at Oldham Road, Rusholme, and Withington.

Analysis of the contents of the deposit gauges and examination of the fabric from the lead peroxide cylinders is carried out by the City Analyst, at monthly intervals.

Soot Deposit Gauges.

For the period ending 31st March, 1938, the highest deposit occurred at Philips Park, where there was a monthly mean of 40·31 tons per square mile and the lowest deposit was shown at Baguley—8·91 tons per square mile.

The average deposit per month for all gauges was 21·85 tons compared with 23·91 tons per square mile for the previous year.

Insoluble matter continued to be higher in summer months than in winter months and soluble matter higher in winter than in summer.

Compared with the previous year there was a reduction in the total deposit at each point of observation except at Withington. This reduction was well marked at Oldham Road, Philips Park, and Rusholme.

The slight increase in mean monthly deposit at Withington was probably due to meteorological conditions.

The table of pH or hydrogen ion concentration values indicates the activity or concentration of acid or alkaline collected matter in the gauges.

During June, a month of low rainfall, the rainwater at all stations was alkaline and in the winter months, especially October to January, markedly acid conditions were found.

CITY OF MANCHESTER.
DEPOSITED ATMOSPHERIC POLLUTION (TONS PER SQUARE MILE)
April 1937—March 1938.

Situation of Gauge	Rainfall m.m.		Insoluble matter		Soluble matter		Total Solids	
	1937·8	1936·7‡	1937·8	1936·7‡	1937·8	1936·7‡	1937·8	1936·7‡
BAGULEY—								
Annual Totals	615	753	43·93	37·34	63·02	79·61	106·96	116·44
Monthly mean	51	68	3·66	3·39	5·25	7·23	8·91	10·58
Monthly mean—summer	52	60	4·00	4·26	5·32	6·88	9·32	11·00
Monthly mean—winter	50	75	3·35	2·67	5·18	7·53	8·50	10·21
BOOTH HALL—								
Annual Totals	640	856	80·88	75·85	94·22	95·95	175·10	171·75
Monthly mean	53	78	6·74	6·90	7·85	8·73	14·59	15·61
Monthly mean—summer	54	71	7·29	7·34	8·21	7·66	15·50	14·99
Monthly mean—winter	53	84	6·19	6·53	7·49	9·61	13·69	16·13
HEATON PARK—								
Annual Totals	686	955	61·83	61·28	76·74	82·98	138·57	143·50
Monthly mean	57	87	5·15	5·57	6·39	8·50	11·55	13·05
Monthly mean—summer	54	78	5·59	6·18	6·35	6·32	11·94	12·46
Monthly mean—winter	60	94	4·72	5·06	6·44	8·47	11·16	13·54
OLDHAM ROAD—								
Annual Totals	636	884	317·38	340·43	153·10	149·83	470·47	490·05
Monthly mean	53	80	26·45	30·95	12·75	13·62	39·20	44·55
Monthly mean—summer	53	72	27·44	35·80	11·07	12·20	38·52	47·96
Monthly mean—winter	53	88	25·45	26·91	14·44	14·81	39·89	41·71
PHILIPS PARK—								
Annual Totals	621	898	345·18	331·01	138·54	140·87	483·72	473·90
Monthly mean	52	82	28·76	30·09	11·55	12·81	40·31	43·08
Monthly mean—summer	52	76	30·12	30·20	10·23	9·99	40·35	40·59
Monthly mean—winter	52	86	27·40	30·00	12·86	15·16	40·26	45·16
RUSHOLME—								
Annual Totals	600	872	206·46	198·84	95·67	104·05	302·13	302·72
Monthly mean	50	79	17·20	18·09	7·97	9·46	25·18	27·52
Monthly mean—summer	48	73	20·20	22·62	9·12	8·42	29·32	30·99
Monthly mean—winter	52	84	14·21	14·31	6·82	10·33	21·04	24·63
WITHINGTON—								
Annual Totals	563	746	69·45	59·92	88·68	82·83	158·13	142·48
Monthly mean	47	68	5·79	5·45	7·39	7·53	13·18	12·95
Monthly mean—summer	45	62	6·23	7·20	6·13	7·44	12·36	14·59
Monthly mean—winter	49	72	5·35	3·99	8·65	7·60	13·99	11·59
ALL GAUGES—								
Average per gauge	623	852	160·73	157·82	101·42	105·08	262·15	262·98
Monthly mean	51	77	13·39	14·35	8·45	9·55	21·85	23·91
Monthly mean—summer	51	70	14·41	16·23	8·06	8·42	22·45	24·65
Monthly mean—winter	53	83	12·38	12·78	8·84	10·50	21·22	23·28

‡ 11 months.

PH VALUES FOR SEVEN MANCHESTER STATIONS.

Month		Baguley	Booth Hall	Heaton Park	Oldham Road	Philips Park	Rusholme	Withington	Average
April	1937	6.0	4.0	4.0	4.0	4.0	5.0	5.5	4.6
May	„	4.0	4.0	4.0	5.0	4.0	5.0	4.0	4.3
June	„	6.5	6.0	6.0	6.0	5.0	6.5	6.5	6.1
July	„	6.0	4.0	4.5	5.5	4.0	6.0	6.0	5.1
August	„	4.0	4.0	4.0	4.0	4.0	6.5	5.5	4.6
September	„	4.0	4.0	4.0	5.0	4.0	4.5	4.5	4.3
October	„	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
November	„	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
December	„	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
January	1938	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
February	„	5.0	4.0	4.0	5.0	4.0	5.0	5.0	4.6
March	„	5.0	4.0	4.0	4.5	4.0	5.0	5.0	4.5
Average for the year ..		4.7	4.2	4.2	4.6	4.1	4.9	4.8	4.5
Average for summer ..		5.1	4.3	4.4	4.9	4.2	5.6	5.3	4.8
Average for winter.. ..		4.3	4.0	4.0	4.3	4.0	4.3	4.3	4.2

Sulphur Pollution.

The method employed indicates the activity of atmospheric sulphur, *e.g.*, in attack on building stone, etc.

During the period concerned, the mean monthly rate of sulphation was 3.30 milligrammes of sulphur trioxide per 100 sq. cms. of exposed surface per day compared with 3.48 for the previous eleven months.

The results demonstrate the great difference in pollution between industrial and residential districts, the figures for Oldham Road, an industrial area, being more than twice those for Withington, a residential district.

As in the previous year, seasonal variation was noticed at all points of observation, much higher figures being obtained for winter months than summer. Increases in pollution were particularly noticeable in November and December, months of foggy weather.

SULPHUR POLLUTION.

Measurement by Lead Peroxide Method.

Twelve months April to March	Weight in milligrammes SO ₃ per 100 square centimetres of exposed surface per day							
	Oldham Road		Rusholme		Withington		Average	
	1937.8	1936.7	1937.8	1936.7	1937.8	1936.7	1937.8	1936.7
Monthly mean.. ..	4.77	5.23	2.87	3.00	2.27	2.22	3.30	3.48
Monthly mean summer.. ..	3.75	3.56	1.98	1.70	1.53	1.35	2.42	2.21
Monthly mean winter	5.79	6.33	3.76	3.87	3.00	2.79	4.18	4.33

OFFENSIVE TRADES.

The administrative powers with regard to offensive trades contained in Section 112 of the Public Health Act, 1875, Section 51 of the Public Health Acts Amendment Act, 1907, and Section 44 of the Public Health Act, 1925, were replaced during the year by the provisions of Sections 107 and 108 of the Public Health Act, 1936, which came into force on the 1st October, 1937.

By this Act certain additional trades are declared to be offensive, though the declaratory order operative in Manchester already includes such trades.

It is provided also that fish frying, which is an offensive trade in this city, shall cease to be a declared offensive trade at the expiration of three years from the date of commencement of the Act, subject to certain reservations and without prejudice to the making and confirmation of a new Order.

For the purposes of Section 107 of the Act a business is deemed to be newly established, *inter alia*, when it is resumed on any premises in which it has been previously carried on, after having been discontinued for more than 18 months.

By Section 44 of the Public Health Act, 1925, which has been repealed, the period was six months.

At the end of 1937 the undermentioned offensive trades were being carried on at 743 registered premises within the City :—

Blood Manure	1	Poultry Food Manufacture	..	..	1
Manufacturer		Fat Melting	..	..	3
Bone Boiling	.. 1	Gut Scraping	..	..	3
Soap Boiling	.. 6	Pickle and Sauce Manufacture	..	..	9
Tallow Melting	.. 2	Rag and Bone Dealing	..	..	26
Tripe Boiling	.. 6	Rubber Paste or Solution Spreader	..	..	9
Fish Curing	.. 2	Size Making	..	..	2
Fish Frying	.. 662	Manure Manufacture	..	..	1
Oil Distilling	.. 3	Rubber Substitute Manufacture	..	..	2
Tanning	.. 4				

During the year the district sanitary inspectors made 3,071 inspections of offensive trades, 2,622 of the visits being to fish-frying establishments.

The fish-frying establishments were found to be clean and satisfactory generally, though in 46 instances cautions were necessary with regard to dirty conditions and minor defects.

On subsequent visits these cautions were found to have been effective.

The 449 inspections of other offensive trades revealed a general freedom from nuisance.

Thirty-eight applications to establish offensive trades were received during the year, viz. :—

Fish frying 22, fish curing 1, rag and bone dealing 14, soap boiling 1.

Consent for limited periods was granted in the following instances :—

Fish-frying 5, fish curing 1, rag and bone dealing 3, and soap boiling 1.

The remaining 28 applications were refused on the grounds of unsuitability of the site or the premises.

Two other offensive trades were established during the year and 11 were discontinued, viz. :—

Trade	Established	Discontinued
Soap Boiling	1	—
Fish Curing	1	—
Fish Frying	—	7
Rag and Bone Dealing	—	2
Rubber Spreading	—	2
Totals	2	11

Twenty-two applications were received for extension of the periods in the consents granted. In all cases the businesses were reported to have been carried on in a satisfactory manner.

Consent was extended for three years in the case of 20 fish-frying businesses, and for twelve months with regard to a rag and bone dealing business and a fat melting business.

Seven instances were reported to the Committee where occupiers of premises had established offensive trades without the consent of the local authority. In four instances legal proceedings were instituted, three cases relating to rag sorting and one to fish frying.

The three former defendants were fined a total of £3 5s. In the latter case the defendant gave an undertaking to the magistrates that he would discontinue the business and the case was adjourned *sine die*. No further proceedings were taken in the remaining three cases reported to the Committee, as the rag sorting businesses concerned have been discontinued.

There were 1,278 observations in connection with effluvium nuisances during the year. These were mainly in the vicinity of two premises mentioned in previous Annual Reports.

At one of these works rubber substitute is produced, and at the other, recovery of solder and copper from old motor-car radiators takes place.

In both cases little nuisance was reported during the year, and the premises continue to be under close supervision by officers of the Public Health Department and also by H.M. Inspector of Alkali Works.

During the summer months of 1937 a petition was received from 24 householders with regard to smells which were alleged to come from a works where shellac bleaching took place by immersion in open vats containing boiling sodium hypochlorite solution.

Continued observations failed to reveal any nuisance from this source, but, in accordance with Section 114 of the Public Health Act, 1875, complaint was made before the Justices. The case was dismissed.

FACTORIES AND WORKSHOPS.

Factory and Workshop Act, 1901.

5,865 inspections were made in connection with the cleanliness, ventilation, overcrowding, and structural conditions in workshops, and with regard to means of escape in case of fire and sanitary accommodation in factories and workshops.

There were also 4,113 inspections of bakehouses during the year (see page), and 563 inspections of workplaces.

Seventy-nine complaints and 19 reports were received from, and 20 complaints and 142 reports were referred to, H.M. Inspector of Factories.

Workshops (excluding bakehouses).

Want of cleanliness and general defects were reported in 39 instances and were dealt with as follows :—

Insanitary Conditions Reported and Cautions Given.

Want of cleanliness	27	
General defects	4	
	—	31

Remedied after Cautions.

Want of cleanliness	29	
(includes 2 cases outstanding from 1936)		
General defects	3	
	—	32

Notices Served.

To cleanse and limewash	2	
To remedy defects	6	
	—	8

Notices Complied with.

To cleanse and limewash	2	
(includes 1 case outstanding from 1936)		
To remedy defects	5	
	—	7

At the end of the year one notice to cleanse and limewash, one notice and one caution to remedy defects were outstanding.

	Factories	Workshops	Total
Number on register at end of 1936	3,410	2,163	5,573
Number registered during year	100	51	151
Number discontinued during year	100	86	186
Number on register at end of 1937	3,410	2,128	5,538

Sanitary Accommodation.

The standard requirements of the Sanitary Accommodation Order, 1903, are administered by virtue of provisions in local Acts.

Ninety-one cases of insufficient or unsatisfactory accommodation in factories, workshops, business premises, etc., were referred to the Chief Technical Assistant for the necessary action.

Twenty-two other cases were reported where defects in sanitary accommodation existed. The appropriate works were effected after verbal cautions by the inspectors in 18 of these cases. In three instances it was found necessary to serve statutory notices, all of which were complied with. One caution was outstanding at the end of the year.

Means of Escape in Case of Fire.

Administration of the provisions of the Factory and Workshops Act, 1901, and the bye-laws made thereunder, with regard to means of escape in case of fire at factories and workshops, is delegated to the Public Health Committee.

Forty-one reports relating to factories and workshops not provided with adequate means of escape in case of fire were referred during the year to the Chief Technical Assistant for action. The necessary work was effected without service of notices in 19 cases, including 12 instances reported prior to 1937.

Statutory certificates were issued on the authority of the Committee in connection with four buildings where the means of escape were deemed to be satisfactory and where such certificates were necessary.

Seven notices to provide satisfactory means of escape in case of fire were served during the year, and 8 notices were complied with (including 4 served prior to 1937).

Eighteen instances were reported where the means of escape were not being maintained. The necessary work was carried out in 17 instances as a result of cautionary letters or verbal cautions, including one case reported in 1936.

Four reports were submitted to the Committee with regard to obstructions to means of escape. In one case the Committee issued a caution, and in the other three cases, as a result of legal proceedings, convictions were recorded and the offenders were fined a total of £7, with costs amounting to 4s.

The Manchester Corporation (General Powers) Act, 1930, enables the Corporation to require means of escape in case of fire in buildings of the warehouse and office class and flats, hotels, schools, etc., over a certain height.

It is to be noted that Section 60 of the Public Health Act, 1936, which came into operation on the 1st October, 1937, contains similar powers.

Thirty-four reports in connection with such premises were referred to the Chief Technical Assistant with a view to appropriate action.

In five instances the necessary work was done without service of notices, in addition to 39 cases reported prior to 1937.

It was found necessary to serve 11 notices during the year and 9 notices were reported to have been complied with, including 4 served prior to 1937. In two cases where the means of escape were reported to be obstructed, the Committee ordered the issue of cautionary letters.

OUTWORKERS.

Regular inspection of premises where outwork is carried on is effected by two female sanitary inspectors to ensure work being done under sanitary conditions and in premises free from infectious disease.

249 firms in the city employ 1,060 outworkers, of whom 846 reside within the municipal boundaries, the remaining 214 being in districts of other local authorities, to whom lists giving the necessary particulars have been sent.

3,995 inspections of the houses of outworkers have been made. In two instances unsatisfactory conditions were reported. The premises were dirty in one case, and on subsequent inspection were found to have been cleansed.

In the other case outwork was being carried on under conditions which were definitely unwholesome. Wearing apparel was being made in the living room of a small house which was occupied by a family of nine persons. Conditions were aggravated due to the room being also used as a sleeping room. The place was dirty. Outwork was discontinued following an interview with the employer.

The standard of cleanliness in outworkers' houses was generally satisfactory, and no case of infectious disease was reported in connection with these premises during the year.

TABLE NO. 3.

1.—*Inspection of Factories, Workshops, and Workplaces, Including Inspections made by Sanitary Inspectors or Inspectors of Nuisances.*

Premises (1)	Number of		Occupiers prosecuted (4)
	Inspections (2)	Written Notices (3)	
Factories (including Factory Laundries) ..	3,231	6	3
Workshops (including Workshop Laundries).	6,747	16	—
Workplaces (other than Outworkers' premises)	563	—	—
Total	10,541	22	3

2.—Defects found in Factories, Workshops, and Workplaces.

Particulars (1)	Number of Defects			Number of Offences in respect of which Prosecutions were instituted (5)
	Found (2)	Remedied (3)	Referred to H.M. Inspector (4)	
<i>Nuisances under the Public Health Acts*:</i> —		cases 1937 prior to cases 1937		
Want of cleanliness	98	96	4	..
Want of ventilation	2	2	1	..
Overcrowding .. .. .	..	..	..	..
Want of drainage of floors ..	..	..	..	..
Other nuisances.. .. .	29	28	3	..
Sanitary accommodation—				
Insufficient	27	9	16	..
Unsuitable or defective ..	47	30	16	..
Not separate for sexes.. ..	4	4	1	..
<i>Offences under the Factory and Workshop Acts:</i> —				
Illegal occupation of underground bakehouse (s. 101)..	..	..	..	..
Other offences	66	27	17	3
(Excluding offences relating to outwork and offences under the sections mentioned in the Schedule to the Ministry of Health (Factories and Workshops Transfer of Powers) Order, 1921)				
Total	273	196	58	3
		254		

* Including those specified in sections 2, 3, 7, and 8 of the Factory and Workshop Act, 1901, as remediable under the Public Health Acts.

Outwork in Unwholesome Premises, Section 108.

NATURE OF WORK (1)	Instances (2)	Notices Served (3)	Prosecutions (4)
WEARING APPAREL— Making, etc.	2	—	—

SHOPS ACTS, 1912 to 1936.

Under the provisions of the Shops Act, 1912, every shop must be closed for the serving of customers after 1-0 p.m. on one week-day in each week unless exemption has been given, or the times of closing have been varied, by orders made under the Act.

Forty-five orders for exemption from compulsory closing or for "fixing the closing day," or for "fixing the closing hours," have been made by the City Council, as follows :—

*Orders made by the Local Authority under the Shops Act, 1912,
for Exemption from Compulsory Closing.*

Trade or Business	Date when Order of Exemption was made
Antique and Fine Art Dealers	2nd April, 1913
Artificial Flower Dealers	2nd April, 1913
Bassinette, etc., Dealers	2nd July, 1913
Booksellers and Stationers	8th January, 1913
Brush and Basket Dealers	5th March, 1913
Bazaars	2nd July, 1913
Chemists	2nd July, 1913
Drapers	2nd April, 1913
Dress, Costume, and Mantle Dealers	5th February, 1913
Furniture, etc., Dealers	2nd July, 1913
Foreign Stamp Dealers	2nd April, 1913
Furriers	5th March, 1913
Grocers and Provision Dealers	7th August, 1912
Glass and China Dealers	2nd April, 1913
Hardware Dealers	5th February, 1913
Hatters	2nd April, 1913
Hosiers and Outfitters	8th January, 1913
Jewellers	8th January, 1913
Knitting Machine Dealers	5th March, 1913
Machinery (Typewriters, etc.) Dealers	1st April, 1914
Music and Musical Instrument Dealers	30th August, 1912
Milliners	2nd July, 1913
Naturalists	2nd July, 1913
Opticians and Instrument Dealers	5th February, 1913
Photographers	2nd July, 1913
Portmanteau, Trunk, Bag, and Fancy Leather Dealers	7th August, 1912
Rubber Goods and Waterproof Dealers	5th March, 1913
Second-hand Booksellers	7th August, 1912
Seeds, Plants, Shrubs, and/or Trees Dealers	5th July, 1933
Theatrical Costumiers	30th January, 1912
Toy and Fancy Goods Dealers	8th January, 1913
Tailors	2nd April, 1913
Umbrella Dealers	2nd April, 1913
Wig Makers, Hair Workers, and Hairdressers' Sundries Dealers	2nd April, 1913

*Orders made by the Local Authority under the Shops Act, 1912, for
“ Fixing the Day ” for the Weekly Half-holiday.*

Trade or Business	Date when Order was made “ Fixing the Day ” for the Weekly Half-holiday	Day Fixed
* Corn and Provender Dealers..	8th January, 1913	Saturday, or (at the option of the shop- keeper), Wednesday
Cloggers	8th January, 1913	
Hairdressers and Barbers.. ..	7th January, 1914	Wednesday, or (at the option of the shop- keeper), Saturday
Pawnbrokers	5th August, 1914	
Boot and Shoe Dealers	3rd February, 1915	
Sale of Meat (other than Pork or Cooked Meat)	14th July, 1920	
Sale of Meat (other than Pork or Cooked Meat), Wythen- shawe Area	25th July, 1934	

* An Exemption Order has been made in this trade fixing the closing hour
on Saturday at 2 o'clock.

*Orders made by the Local Authority under the Shops Act, 1912, for
“ Fixing the Closing Hour ” for the several days of the week.*

Trade or Business	Date when Order was made " Fixing the Closing Hour " for the several days of the week	Closing Hour					
		Mon.	Tue.	Wed.	Thu.	Fri.	Sat.
Hairdressers and Barbers	21st May, 1924 ..	p.m. 8 0	p.m. 8 0	p.m. 1 0	p.m. 8 0	p.m. 8 0	p.m. 9 0
Boot and Shoe Dealers	28th April, 1915 ..	8 0	8 0	1 0	8 0	9 0	10 30
Sale of Meat (other than Pork or Cooked Meat)	25th October, 1920 .	7 0	7 0	1 0	7 0	8 0	7 0
Sale of Meat (other than Pork or Cooked Meat), Wythenshawe Area	25th June, 1934 ..	7 0	7 0	1 0	7 0	8 0	7 0

Shops Act, 1934, Section 10.

During the year, 2,642 visits were paid by the shops inspectors in connection with the Act, and defects were reported in 146 instances, which were dealt with as follows :—

Requirement	Number deficient	Number remedied as a result of verbal caution	Number remedied as a result of preliminary notice	Number referred to Chief Technical Assistant for the necessary action
Provision and Maintenance of:—				
Ventilation	7	1	—	2
Temperature	51	14	11	1
Sanitary Conveniences	54	21	3	25
Lighting	5	2	1	—
Washing facilities	13	4	3	2
Facilities for taking meals	16	5	6	1
Totals	146	47	24	31

In 52 instances dirty conditions were reported ; 43 of these cases related to shops, four referred to sanitary conveniences in shops, and restaurant kitchens were concerned in the remaining five cases.

On subsequent inspections the necessary cleansing was found to have been effected in each case. It was not found necessary to serve any statutory notices under Section 10 of the Act during the year.

Two applications were received for exemption from the provision of Section 10 of the Shops Act, 1934. These applications related to the provision of sanitary accommodation and washing facilities, and the necessary certificates of exemption were granted as it was reported that there were special circumstances and that suitable and sufficient sanitary accommodation and washing facilities were conveniently available. A certificate with regard to sanitary accommodation and washing facilities was granted in connection with an application which was shown as adjourned at the end of 1936.

Additional legislation with regard to shops came into force on the 1st January, 1937, viz., The Shops Act, 1936, Shops (Sunday Trading Restriction) Act, 1936, and the Retail Meat Dealers' Shops (Sunday Closing) Act, 1936.

The Shops Act, 1936, provides for the application of the Shops Acts, 1912 to 1934, to premises and places where the business of lending books or periodicals is carried on for purposes of gain.

The general effect of the Shops (Sunday Trading Restriction) Act, 1936, is :—

- (1) To require the closing of shops on Sundays, subject to a number of exemptions designed to meet the reasonable needs of the public ; and
- (2) to provide for compensatory holidays during the week for persons employed on Sunday about the business of those shops which are permitted to open, subject to exceptions for certain classes of workers.

The provisions as to the closing of shops are in substitution for the provisions of the Sunday Observance Acts, and the Act also applies to the carrying on of retail trade or business in places other than shops.

Persons of the Jewish religion, or regularly observing the Jewish Sabbath, are enabled to carry on retail trade or business on Sunday up to 2 p.m. provided that they close for the whole of Saturday and comply with certain other conditions.

The local authority may, by order containing such incidental, supplemental, or consequential provisions as may be deemed necessary, permit transactions with respect to a limited number of commodities on Sundays.

The Act repealed the Hairdressers' and Barbers' Shops (Sunday Closing) Act, 1930 as from the 1st May, 1937.

The Retail Meat Dealers' Shops (Sunday Closing) Act, 1936, prohibits the sale on Sundays of butchers' meat in butchers' shops or elsewhere, subject to certain exceptions applicable to persons of the Jewish faith.

The provisions of these Acts, relating to exhibition of forms, keeping of records, half-holidays and compensatory holidays, have been delegated for administrative purposes to the Public Health Committee.

Details of the work of the inspectors in connection with the Shops Acts are as follows :—

Number of inspections for all purposes during 1937	...	11,539
(including 38 visits to wholesale shops and warehouses).		
Number of shops on register, 31st December, 1936	..	19,136
Number registered during 1937	.. .. .	282
Number discontinued during 1937	.. .. .	446
Number on register 31st December, 1937	.. .. .	18,972

In 477 instances, offences against the provisions of the Shops Acts were reported and were dealt with as follows:—

Offence	Number of intimations sent	Number of intimations complied with
Failing to exhibit prescribed form <i>re</i> Assistants' Half-holiday	177	147
Failing to exhibit notices and keep prescribed records <i>re</i> employment of young persons ..	106	104
Failing to exhibit prescribed forms with respect to seats for female shop assistants	110	103
Failing to provide means and maintain ventilation	2	—
Failing to provide means for maintaining a reasonable temperature	38	11
Failing to provide and maintain suitable and sufficient sanitary conveniences	11	3
Failing to provide suitable and sufficient means for lighting	3	1
Failing to provide and maintain washing facilities	7	3
Failing to provide and maintain facilities for the taking of meals	7	6
Failing to exhibit prescribed forms and keep prescribed records <i>re</i> Sunday Trading ..	16	15
Totals	477	393

Offences reported to Committee.

NATURE OF OFFENCE	COMMITTEE PROCEEDINGS			MAGISTERIAL PROCEEDINGS			
	Number reported	Ordered to be summoned	Cautioned	Summoned	Fined	Amount of Fines	Costs
Employing a shop assistant on the weekly half-holiday	2	2	—	2	2	£ s. d. 0 10 0	—
Failing to keep prescribed records showing hours worked, intervals for meals and particulars of overtime <i>re</i> Young Persons	2	2	—	2	2	0 10 0	—
Totals	4	4	—	4	4	1 0 0	—

TIPS.

At the end of 1937, 58 tips were in use in the city, 11 of these belonging to the Cleansing Department, 8 to other Corporation Departments, and 36 were in private ownership.

Four new tips were commenced during the year ; one of these is owned by the Corporation Housing Committee and the other three are used by private firms.

All tips in the city have received close attention during the year with a view to the prevention of nuisances.

112 inspections of Corporation tips and 302 inspections of privately-owned tips were made during 1937.

In 11 instances unsatisfactory conditions were reported at tips. In three cases Corporation tips were concerned, the remainder being privately owned.

As a result of verbal cautions or cautionary letters to the owners, satisfactory conditions were reported on subsequent inspections.

STABLES.

All the stables in the city have been inspected during 1937, with a view to the detection of nuisance and to ensure proper storage and frequent removal of manure, especially during the fly-breeding season.

There are 876 stables in the city, with accommodation for 3,587 horses and 21 ponies and donkeys.

Ten new stables were reported to have been commenced during 1937, and the use of 53 stables was discontinued.

There is a decline in the number of stables existing compared with previous years, and further decreases are to be expected as a result of the development of motor transport.

7,002 inspections were made during the year. With a number of exceptions, the stables were found to be satisfactory and in accordance with the bye-laws.

Four stables were reported to be structurally unsuitable for the purpose, and notices were served to discontinue the keeping of horses.

In three instances these notices were complied with, and in the remaining case the stable was rebuilt under the supervision of the Town Planning and Buildings Department.

Defects were found at two other stables and notices were served.

The necessary work was carried out at one stable, and in the other case the work was outstanding at the end of the year.

Notices served in connection with one stable in 1934, one stable in 1935, and two stables in 1936 have been complied with.

In 12 other instances minor defects were remedied as a result of verbal cautions by the inspectors. Verbal cautions were given also in 82 cases where dirty conditions were found or the removal of manure neglected, and on subsequent inspections the premises were found to be satisfactory.

Eleven notices requiring removal of manure were served during the year, and all were reported to have been complied with.

CANAL BOATS.

The canal boats plying on approximately 11½ miles of canals within the City have received close attention during the year.

1,170 inspections were made to ascertain whether the requirements of the Canal Boats Regulations were being observed, and the 29 infringements reported were dealt with as follows :—

Nature of Infringement	Number Reported	Cautioned by Inspector	Included in Notices	Cautions complied with	Notices complied with
Certificates missing or incorrect	6	1	5	1	5
Markings on boat incorrect, defaced, or obliterated	1	—	1	—	1
Overcrowded	1	—	1	—	1
Non-separation of sexes	1	—	1	—	1
Dirty conditions	4	2	2	2	2
Boats requiring painting	7	—	7	—	7
General defects	5	—	5	—	5
Totals	25	3	22	3	22

Notices were served for 22 infringements in connection with 12 boats, and were all complied with.

There were four cautions outstanding at the end of 1936. Three of these have been complied with, and in the remaining case the boat concerned has not visited the city since.

No case of infectious disease has been reported.

Three boats were registered during the year and one has been removed from the register. One newly-registered boat was motor-driven (oil engine), and recommendations of the Ministry of Health (August, 1935) with regard to lighting and prevention of engine fumes entering the cabins, were features of its construction.

At the 31st December, 1937, there were 218 boats on the register.

Of these 207 were horse-drawn, 9 were driven by oil engine, and 2 were steam-driven.

The decline in the number of registered canal boats is revealed by comparison with the figures for 10 years ago, when there were 419 boats on the register, a reduction of 201.

REMOVAL OF INFIRM AND DISEASED PERSONS.

The provisions of the Manchester Corporation (General Powers) Act, 1930, enable the Justices to grant an order on the certificate of the Medical Officer of Health that a person is infirm or diseased, and is incapable of taking care of himself/herself, and is not receiving proper care and attention from others. The order provides for compulsory removal to hospital of the person concerned.

Twelve cases of infirm persons were reported during the year.

Eleven were persuaded to enter municipal hospitals and the other person died at home.

Five of the six outstanding cases from previous years were kept under observation, one person having removed and being untraceable. With regard to one case mentioned in the Annual Report for 1936, where the person had been removed to hospital on a Justices' order, no further application for renewal of the order was made as the patient decided to remain voluntarily in the hospital.

In all cases the necessary arrangements were made for the cleansing of the houses.

EXHUMATIONS.

Seven exhumations took place during 1937 at City Cemeteries, and in six cases the remains were reinterred in the following burial grounds :—

St. James' Churchyard, Rusholme ; St. Joseph's Catholic Cemetery, Moston ; St. Andrew's Churchyard, Higher Blackley ; Philips Park Cemetery, Bradford (two cases), and Southern Cemetery.

In the remaining case the remains were exhumed for the purpose of cremation at the Manchester Crematorium, Southern Cemetery.

The exhumations were supervised by sanitary inspectors of the Public Health Department, to ensure that the work was carried out in a proper manner, with due care and decency, and freedom from nuisance.

RAG FLOCK ACTS, 1911-1928.

Despite the difficulties encountered in administering the law, the Department has continued its efforts to ensure the cleanly condition of rag flock used in the manufacture of bedding, upholstery, and cushions.

STATEMENT OF ACTION UNDER THE RAG FLOCK ACTS.

Visits to premises where rag flock is made, used, or likely to be used	399
Statutory samples obtained	85
Samples which conformed to the prescribed standard of cleanliness	76
Samples which failed to conform to the prescribed standard of cleanliness	9
Cases not proceeded with because of insufficient evidence to prove that the material had been woven, knitted, or felted	2
Cases reported to the Committee	7
Offenders cautioned by the Committee	1
Prosecutions instituted	6
Offenders fined	5
Case withdrawn	1
(In this case the summons was served on a bedding manufacturer who issued a summons against the supplier and proved warranty. The supplier was fined £3 3s. with costs amounting to £4 14s. 6d.)	
Total fines and costs	£41 6s. 0d.
Number of premises where rag flock is made	3
Number of known premises in the City where rag flock may be used in the manufacture of :—	
Bedding	55
Upholstery	114
Cushions	21
—	—
Total	190

In the Annual Reports for the years 1933 to 1936 inclusive, references were made to the need for adequate legislation to deal with *all* types of filling material and some indication was given of steps which were being taken by the Association of Municipal Corporations and the National Federation of Bedding and Allied Trades, with a view to achieving this desirable object.

In November, 1937, the Medical Officer of Health submitted to the Public Health Committee the following report by the Chief Sanitary Inspector on the subject of "unclean fillings used in the manufacture of beds, upholstery, and cushions."

UNCLEAN FILLINGS USED IN THE MANUFACTURE OF BEDS,
UPHOLSTERY, AND CUSHIONS.

Considerable quantities of flocks made from rags are used in Manchester and other industrial districts for filling beds, upholstery, and cushions.

Statutory legislation dealing with this subject is contained in the Rag Flock Acts and Regulations, 1911-1928.

An obligation devolves upon Sanitary Authorities to enforce the provisions of these Acts at premises within their districts where rag flock is used, sold, or manufactured.

Legislation has prescribed a standard of cleanliness for rag flock which is as follows :—

It must not contain more than 30 parts of soluble chlorine per 100,000 parts of flock.

This standard is very low and can easily be obtained by washing the rags in cold water, in fact some manufacturers attain the standard by simply soaking the rags in cold water.

The original intention of the Rag Flock Acts was to ensure washing, but it has since been found that the letter of the law can be obeyed whilst the spirit is evaded.

Although large quantities of rag flock are used in Manchester no appreciable amount is manufactured in the city of Manchester. Manchester supplies are obtained principally from districts in East Lancashire and the West Riding of Yorkshire.

Regular and frequent inspection and sampling at the place of manufacture is essential for the maintenance of a clean supply.

It is to be deplored that in some districts where rag flock is made inactivity in executing statutory duties results in considerable quantities of unclean fillings being distributed throughout the country (including Manchester) which ultimately form part of the bedding, upholstery and cushions used by the public. Some factories turning out tons of unwashed material weekly are never visited by sampling officers.

Not only are these conditions undesirable from a public health standpoint but they have a serious effect in that reputable flock-makers are being placed, by the price cutting of manufacturers who evade the cost of washing, in the unfortunate position of being compelled to take the choice of either producing unclean material or losing business.

Washing increases the price of flock by £4 to £5 per ton.

Particularly in the case of jute wadding would more stringent supervision at the source tend to prevent the manufacture and distribution of unclean material. Large quantities of this product are being made wholly or partially from dirty old sacking which undergoes no cleansing process.

The disintegrating machinery used in the manufacture has reached such a high state of perfection that it is impossible in many instances to institute legal proceedings outside the districts where the flock is made, because of the difficulty in producing sufficient evidence that the product has been made from fabricated material. Not only has the prosecution to prove excess of

chlorine over the prescribed limits, but to satisfy the magisterial bench that the product is derived from fabric, as no legal standards exist for any other fillings than "flock made from woven knitted or felted fabrics."

No such difficulty is experienced in dealing with samples of rag flock taken at the place of manufacture, as in these circumstances direct evidence is obtainable as to the origin of the product.

In some districts where rag flock is *used* undue importance is attached to the fact that the material has been purchased under a warranty that it conforms to the prescribed standard of cleanliness.

The Chief Sanitary Inspector has ascertained that flock makers have no difficulty in disposing of unclean rag flock to upholsterers and bedding manufacturers in certain districts provided they are prepared to sell it under a guarantee, as some local authorities deem it unnecessary to sample flock bought under a guarantee. Confirmatory evidence can be obtained by reference to annual health reports.

It is significant to note that practically all the rag flock used in Manchester, whether clean or dirty, is purchased under guarantee and we have found that certain flock makers have no compunction in giving guarantees of cleanliness with the most filthy products.

Lack of uniformity in administering the Acts is detrimental to Manchester firms as they have to compete with upholstery and bedding firms from districts where, owing to inadequate supervision, unclean filling materials obtainable at less cost than washed material are being used.

Reference has been made in the annual reports of the Medical Officer of Health for the years 1933—36 inclusive to the necessity of legislative amendment.

For over three years the matter has been under consideration by representatives of the Association of Municipal Corporations and the National Federation of Bedding and Allied Trades.

In May, 1936, a joint memorandum prepared by these two bodies was submitted to the Ministry of Health.

This memorandum put forward the existing legal position, the difficulties in administration and certain recommendations for suggested legislation which briefly are as follows :—

- (1) Extension of definition of rag flock to include flock made from yarn, twine, or rope.
- (2) Prohibition of the manufacture of rag flock except on premises registered by a central authority, such authority to be empowered to refuse registration unless adequate equipment has been provided for cleansing and sterilizing the flock.
- (3) Right of entry to be given to officers of a local authority into any premises where flock used or sold in their district is made, with power to take proceedings in respect to offences they discover.
- (4) Local authorities to be empowered to inspect books and records to ascertain source of materials used.
- (5) Power of action with respect to finished articles filled with unclean materials.
- (6) Increased penalties.
- (7) Extension of the Act by Order in Council to other materials used for filling beds, upholstery, or similar articles.

Although eighteen months have elapsed since this memorandum was submitted to the Ministry of Health the unsatisfactory conditions outlined in this report continue.

Several members of the Bedding Federation and other flock and bedding manufacturers have expressed dissatisfaction at the slow rate of progress towards essential legislative amendment.

This subject has recently been under consideration by the Town Council of High Wycombe, Buckinghamshire (an important centre for the manufacture of furniture and bedding). At their last meeting a resolution was approved urging the necessity of amending legislation on the lines indicated in the foregoing memorandum.

It was also resolved at the same meeting that the Ministry of Health be urged to enquire into the manufacture and importation of all forms of filling used in upholstery, bedding, and similar articles for human use, and to introduce such legislation as may be necessary for controlling such manufacture and importation to ensure the highest degree of purity.

It was recommended that copies of the resolution be forwarded to the Minister of Health, the Association of Municipal Corporations, and local Members of Parliament.

Bedding other than that made from rag flock is being sold in Manchester and elsewhere in a most unhygienic condition and in many instances with a guarantee which implies the reverse.

Feathers from second-hand beds (some imported into the country) are made into "new" beds and pillows without undergoing any cleansing or sterilization. In some cases new feathers which have not been properly cleansed are used.

In order to ascertain the condition of feathers used in pillows sold in Manchester the Chief Sanitary Inspector purchased 13 pillows at various shops in the city. These were submitted to the City Analyst for analysis as to chlorine content and oxygen absorption, and to two trade experts for their opinion as to cleanliness and the presence of old feathers.

Ten were found to be definitely unsatisfactory, including some which were very dirty.

In most cases they had been guaranteed "cleansed and purified" and in some instances as "sterilized."

In ten cases the chlorine contents varied from 100 parts per 100,000 to 500 parts per 100,000 indicating that they had not been subjected to washing.

Fuller details regarding these pillows are given in the Annual Report of the Medical Officer of Health, 1936, page 432.

The Medical Officer of Health has communicated with medical officers of a number of other large industrial towns in the hope that sufficient general information will be made available to enable a definite approach to be made to the Ministry of Health by the Association of Municipal Corporations with a view to the promotion of legislation dealing with the control of filling materials in general.

On 14th October, 1937, a deputation from the Feather Purifiers' Association interviewed the Ministry of Health and Board of Trade with a view to a standard of purity for feathers being determined.

The Chief Sanitary Inspector is of opinion that in the interests of public health no further delay should occur in dealing with these matters and submits the following suggestions :—

- (1) That the Minister of Health be urged to promote legislation in connection with rag flock on the lines indicated in the joint memorandum submitted to the Ministry by the Association of Municipal Corporations and the National Federation of Bedding and Allied Trades.
- (2) That the Association of Municipal Corporations be requested to enquire into the manufacture and importation of all forms of filling used in the manufacture of upholstery, bedding, cushions, and similar articles for human use, with a view to the Ministry of Health being approached to promote legislation for controlling such manufacture and importation to secure an adequate standard of purity.

Appended is a statement giving the chronological record of events towards legislative amendment dealing with rag flock.

APPENDIX.

- 29th November, 1933. The Town Clerk of Manchester submitted a communication to the Association of Municipal Corporations outlining the difficulties experienced in the administration of the Rag Flock Acts 1911 to 1928. About the same time the National Federation of Bedding and Allied Trades drew the attention of the Ministry of Health to the necessity of amending legislation.
- 11th January, 1934. Standing Sub-Committee B of the Association of Municipal Corporations considered the subject and recommended the Law Committee to make a representation to the Ministry of Health that the Rag Flock Acts as they stand are unworkable, because it is impossible to prove in all cases that the material has been derived from fabric, also that the Acts should be extended to cover all filling materials.
- 22nd February, 1934. Law Committee of the Association of Municipal Corporations adopted the above recommendation.
- 7th March, 1934. Recommendation referred to the Ministry of Health by the Association of Municipal Corporations.
- 12th April, 1934. Ministry of Health replied to the Association of Municipal Corporations and requested further particulars of difficulties met with, and suggestions as to the lines amending legislation should take.
- July, 1934. Deputation to Ministry of Health from National Federation of Bedding and Allied Trades urging the Minister to take action with regard to unclean material.
- 14th February, 1935. Informal meeting held between representatives of the Association of Municipal Corporations and Bedding Federation. At the conclusion it was arranged that the Association of Municipal Corporations should submit proposals to the Bedding Federation for amending legislation and that the Federation should reply.

9th May, 1935.

Further joint meeting held of the Association of Municipal Corporations and Bedding Federation, and proposals for amending legislation further discussed.

9th January, 1936.

Meeting of Standing Sub-Committee B of the Association of Municipal Corporations was held and consideration given to the observations of the Bedding Federation to the draft memorandum to be submitted to the Ministry of Health.

It was decided to discuss the matter further with the Federation.

7th February, 1936.

Meeting held of representatives of Association of Municipal Corporations and Bedding Federation, to discuss the memorandum to be submitted to the Ministry of Health.

It was pointed out at this meeting by one of the members of the Federation that the matter had been under consideration since 1933 during which time law abiding manufacturers had been working under extreme difficulties.

He expressed the opinion that the amount of dirty material on the market was increasing, and stated that new rag flock factories were being opened without any washing plant.

He requested that matters should be expedited in the interests not only of public health, but of those manufacturers who were handicapped by unfair competition because they complied with the law.

23rd April, 1936.

Council of Association of Municipal Corporations considered and approved Joint Memorandum to be submitted to Ministry of Health.

16th May, 1936.

Joint Memorandum submitted to Ministry of Health giving full particulars, and suggesting the lines amending legislation might take.

4th November, 1936.

Letter from Ministry of Health to Association of Municipal Corporations suggesting conference between representatives of the Association and Officers of the Ministry.

12th February, 1937.

Informal discussion took place at the Ministry of Health between representatives of the Ministry of Health, Home Office, Board of Trade, and Association of Municipal Corporations. (This was said to be preliminary to a further conference to be called at which the Bedding Federation would be represented.)

Arising out of the above discussion the Medical Officer of Health furnished the Ministry of Health with reports on conditions found at certain rag flock factories and samples of rag flock which are giving rise to difficulties in administering the Acts.

The Committee passed the following resolutions, which were subsequently confirmed by the City Council, viz. :—

- (1) That the Minister of Health be urged to promote legislation in connection with rag flock on the lines indicated in the joint memorandum submitted to the Ministry by the Association of Municipal Corporations and the National Federation of Bedding and Allied Trades.
- (2) That the Association of Municipal Corporations be requested to enquire into the manufacture and importation of all forms of filling used in the manufacture of upholstery, bedding, cushions, and similar articles for human use, with a view to the Minister of Health being approached to promote legislation for controlling such manufacture and importation to secure an adequate standard of purity.
- (3) That the Town Clerk be instructed accordingly.

On the 7th December, 1937, the Town Clerk submitted the following report on the subject to the Committee :—

26th November, 1937.

*Unclean Fillings Used in the Manufacture
of Beds, Upholstery, and Cushions.*

The Town Clerk adverts to the Minute of the Sub-Committee passed on the 15th instant in relation to the above matter.

As the Committee are aware, the Association of Municipal Corporations have been pressing the Ministry for some time to introduce legislation to strengthen the law relating to rag flock. Meetings have been held with the Trade, and certain recommendations agreed with the Trade were forwarded by the Association to the Ministry. One or two meetings have also taken place with the officials of the Ministry.

It has now been announced that the Minister has decided to appoint a Departmental Committee to consider this matter and evidence will be submitted to that Committee in due course by the Association. Nothing further, therefore, can be done until the Committee's report is received.

In the Annual Report for 1936, particulars in detail were given regarding feather pillows which had been purchased in Manchester, which demonstrated that bedding, other than that made from rag flock, is being sold in a most unhygienic condition and in many instances with a guarantee which implies the reverse.

Towards the end of 1937, it came to the knowledge of the Department that one of the leading stores in the City had entered into a large contract for feather pillows and that the feathers consisted of second-hand imported unwashed goose feathers and unwashed poultry feathers.

The store concerned had in fact commenced to market the pillows but as a result of representations by the Department withdrew them from sale.

FABRICS (MISDESCRIPTION) ACT, 1913.

Sixty visits were made under the provisions of this Act but no samples were purchased as in no case would the shopkeeper declare the material to be safe and non-inflammable.

PHARMACY AND POISONS ACT, 1933.

The provisions of this Act and the Poisons Rules, in connection with poisons in Part II. of the Poisons List, with respect to entry on the local authority's list and inspection of premises are administered by the Public Health Committee.

The poisons listed in Part II. of the Poisons List which may be sold by listed sellers comprise substances which are in common use for purposes other than the treatment of human ailments and which are deemed necessary to the public.

40 applications were received during the year from persons desiring entry of their names on the local authority's list and 702 applications for retention of names on the list.

These applications were in the prescribed form.

Reports on the premises, etc., were submitted to the Committee and in no case was it necessary to refuse to enter or refuse to retain a name on the list. There were also two applications in connection with change of address. A total of £190 12s. was paid in fees to the department.

The selling of poisons was discontinued during the year by 69 persons whose names were contained in the local authority's list.

1,384 visits were made to premises for purposes of investigating applications, inspecting poison books prescribed by the Act, and to unregistered premises.

Nine offences were reported to the Public Health Committee during the year. Three of these offences related to the selling of poisons on premises not entered in the local authority's list, and the offenders were ordered to be summoned before the Magistrates.

In two cases fines amounting to £1 were imposed, the remaining case being dismissed.

The six other offences concerned the sale of poisons not labelled in accordance with the Rules. As a result of legal proceedings, four convictions were recorded, fines amounting to £5 10s. being imposed, and two cases were dismissed.

In connection with these offences it was necessary to obtain 8 statutory samples, 3 of which were submitted to the Public Analyst for examination and 5 samples were required with respect to infringements of the provisions *re* labelling.

The local authority's list contains the following particulars of listed sellers :—

Type of Business	Persons Listed	
	Sellers	Deputies
Grocers	450	537
Hardware Dealers	150	167
Seedsmen	9	14
Florists	1	1
Horticultural and Agricultural Sundries.. .. .	11	11
Herbalists	16	15
Drug Stores other than Chemists' Shops.. .. .	27	29
Hairdressers	33	35
Miscellaneous	45	31
Total	742	840

COMPLAINTS AND DEPARTMENTAL REFERENCES.

Complaints and references to this Section of the Department total 10,123.

Of these, 7,322 were from members of the public, the remainder being as under :—

References from	Authority, etc., concerned	References to
1,698	Other departments of the Corporation	3,484
98	H.M. Inspector of Factories	170
5	Other local authorities	214

Reports with regard to 69 streets and passages requiring paving were referred to the Highways Committee by the Sanitary Sub-Committee, and notification of the paving of 103 streets, etc., was received from the former Committee.

STUDENT SANITARY INSPECTORS AND HEALTH VISITORS.

In accordance with arrangements approved by the Public Health Committee, the department has afforded during the year facilities for training in practical sanitary inspection to eight student sanitary inspectors and thirty-five student health visitors, who were qualifying for examinations for the certificates recognised by the central and local government authorities.

TABLE NO. 4.

NUMBER OF INSPECTIONS AND VISITS.

Primary inspections of dwelling-houses under Housing Act, 1936.. .. .	5,674	Dwelling-houses 106,931
Subsequent inspections of dwelling-houses under Housing Act, 1936	15,445	
Inspections by Housing Inspectors—Clearance, etc., Areas	1,633	
Visits <i>re</i> removals, disinfestations, etc., from Clearance, etc., Areas	1,646	
Visits <i>re</i> disinfestation of houses in Clearance, etc., Areas	2,109	
Visits <i>re</i> demolition of houses in Clearance, etc., Areas	1,367	
Primary inspections of dwelling-houses under Public Health Acts	10,170	
Subsequent inspections of dwelling-houses under Public Health Acts	27,579	
Primary inspections of infected houses	4,876	
Subsequent inspections of infected houses	4,154	
Inspections of dwelling-houses <i>re</i> Tuberculosis	11,389	
Other visits <i>re</i> Tuberculosis	4,558	
Visits <i>re</i> contacts—Infectious disease	303	
Houses let-in-lodgings	10,502	
Tents, vans, sheds	361	
Homes of outworkers	3,995	
Canal Boats	1,170	
Bakehouses	4,113	
Food preparation premises	901	
Shops <i>re</i> sale of bread	997	
Hotels, beerhouses <i>re</i> sale of beer	1,896	Total 70,654
Restaurant kitchens	563	
Butcher's shops and bacon stores.. .. .	616	
Markets <i>re</i> sale of food	133	
Offensive Trades—Fish fryers	2,622	
Offensive Trades—Other than fish fryers	449	
Observations <i>re</i> effluvium nuisances	1,278	
Rag and bone dealers—Barrows	49	
Works boiler plant <i>re</i> smoke abatement	806	
Refuse tips—Corporation.. .. .	112	
Refuse tips—Private	302	
Stables	7,002	
Piggeries	110	
Slaughterhouses	4	
Poultry killing premises	25	
Sanitary accommodation at schools	204	
Sanitary accommodation at parks, etc.	1,763	
Land	899	
Watercourses	37	
Streets, passages, roadways, and footpaths	3,914	
Exhumations	14	
Factories	3,231	
Workshops	2,634	
Shops <i>re</i> Shops Acts	11,539	
Cinemas, Theatres, Dance, and Billiard Halls	114	
Premises in connection with Rag Flock Acts	399	
Visits to registered premises—Food and Drugs (A adulteration) Act, 1928	152	
Artificial cream manufacturers	3	
Visits <i>re</i> Pharmacy and Poisons Act, 1933	1,384	
Other business premises	4,719	
New buildings (to test drains)	2,512	
Visits in connection with Fabrics Misdescription Act	60	
Public conveniences	1,781	
Miscellaneous visits	13,317	
Total	177,585	

TABLE NO. 5
SHOWING WORK DONE AFTER LETTER OR PRELIMINARY NOTICE HAS
BEEN ISSUED

Nature of Work	Letters or Preliminary Notices Issued		Complied with*	
	Letters, etc.	Premises	Letters, etc.	Premises
General repairs to dwelling-houses	1,585	2,743	1,656	2,448
Urgent defects at dwelling-houses which have been ordered to be closed or which are on the list for consideration of the Committee	2,078	2,774	2,024	2,619
Cleansing of dirty or verminous houses.. .. .	3	3	3	3
To afford facilities to inspect premises	147	147	147	147
To inscribe name and address of the Medical Officer of Health and/or landlord and/or "permitted number" in the rent book	206	280	173	232
Provision, repair, and reconstruction of drains	16	21	6	9
To afford facilities for inspection and testing of drains covered without inspection	12	25	12	25
Provision or repairs to rainwater pipes and eavesgutters.	9	9	4	4
Repairs to water-closets	14	14	20	20
Provision of sinks	1	1	1	1
Paving, etc., of yard surfaces	7	27	7	27
Paving, etc., of passage surfaces	20	104	21	123
Removal of offensive deposits	87	97	81	94
To remedy defects in hotels, beerhouses, etc.	363	363	319	319
To exhibit prescribed form <i>re</i> Shop Assistants' Half-holiday	177	177	147	147
To exhibit notices and keep prescribed records <i>re</i> employment of young persons in shops	106	106	104	104
To exhibit prescribed forms <i>re</i> seats for female shop assistants	110	110	103	103
To provide means and maintain ventilation in shops ..	2	2	—	—
To provide means for maintaining a reasonable temperature in shops	38	38	11	11
To provide and maintain suitable and sufficient sanitary conveniences in shops	11	11	3	3
To provide and maintain suitable and sufficient means for lighting in shops	3	3	1	1
To provide and maintain washing facilities in shops ..	7	7	3	3
To provide and maintain facilities for the taking of meals in shops	7	7	6	6
To exhibit prescribed forms and keep prescribed records <i>re</i> Sunday Trading	16	15	15	15
To abate nuisances at tips	8	8	8	8

* Includes some letters, etc., issued in 1936.

Where the work required in letters or preliminary notices has not been executed statutory notices have since been served.

TABLE No. 6.
SHOWING STATUTORY NOTICES SERVED AND COMPLIED WITH UNDER THE
PUBLIC HEALTH, HOUSING, FACTORY AND WORKSHOP ACTS, AND THE
VARIOUS LOCAL ACTS AND BYELAWS.

Work Specified	Number of Notices Served		* Number of Notices Complied with	
	Notices	Premises	Notices	Premises
Repairs to dwelling-houses	742	978	776	983
Repair and maintenance of public sewers	19	74	..	..
Provision, repair, and reconstruction of drains	503	654	520	688
Provision or repair of rainwater pipes and eavesgutters..	309	341	345	373
Provision or repair of water-closets in dwelling-houses..	253	295	242	269
Provision of sinks	10	14	2	2
Paving, flagging, or repairing of yard surfaces	267	329	271	362
Paving, flagging, or repairing of passage surfaces	239	1,153	232	1,021
Cleansing and limewashing of dwelling-houses	25	25	26	26
Houses Let-in-lodgings—				
To furnish particulars prior to registration	202	202	212	212
To provide water supply and sinks	15	15	23	23
To provide ventilation to rooms, staircases, or passages	5	5	12	12
To provide washing accommodation	4	4	2	2
To cleanse walls and ceilings—farmed houses.. .. .	74	74	81	81
To afford facilities to inspect premises	12	12	11	11
Repairs to canal boats	12	12	12	12
Discontinue keeping animals, other than horses and swine	8	9	7	8
Repairs to stables and provision of manure steads	2	2	5	5
Discontinue using premises as stables	4	4	4	4
Removal of manure from stables	11	11	11	11
Removal of offensive deposits	57	60	60	63
Remedy defects in bakehouses.. .. .	4	4	3	3
Compliance with bye-laws <i>re</i> sale of food on open sites.	10	10	1	1
Cleansing and limewashing of workshops	2	2	2	2
Remedy defects in workshops	6	6	5	5
To provide, etc., sanitary accommodation in factories, workshops, etc.	3	3	3	3
Provision of means of escape in case of fire at factories, workshops, and business premises	18	18	17	17
To prevent the emission of smoke from chimneys of premises other than dwelling-houses	38	—	43	—

* Includes some notices served in 1936.

SHOWING OFFENCES REPORTED TO THE COMMITTEE AND SUBSEQUENT ACTION.

	Cases reported	Notices ordered to be served	Ordered to be summoned	Work done before issue of summons	Cautioned or Excused	Summoned	Fined	Magistrate's Order granted	Withdrawn	Dismissed	Amount of	
											Fines	Costs
	£ s. d.	£ s. d.	£ s. d.									
Neglecting to repair houses after notice	302	..	302	288	..	14	2	1	11	..	2 10 0	1 14 6
Neglecting to comply with Order of Court to repair houses	1	..	1	92	..	1	1	..	..	..	0 10 0	0 14 0
Neglecting to provide eavesgutters or downspouts after notices	98	..	98	1	..	6	5	..	..	..	3 10 0	0 13 0
Neglecting to cleanse houses after notices	3	..	3	21	..	2	..	2	1	..	..	0 19 6
Neglecting to remove accumulations of offensive matter after notices	24	..	24	..	..	3	..	..	..	1	0 5 0	..
Neglecting to comply with Magistrates' Order to remove accumulation of offensive matter	2	..	2	33	..	2	2	1	..	..	2 10 0	0 6 6
Neglecting to repair privies, etc., after notice	35	..	35	3	..	2	..	1	..	..	..	..
Neglecting to discontinue keeping animals after notices	4	..	4	1	..	1	..	..	..	..	0 10 0	..
Neglecting to repair stables after notices	1	..	1	1	..	..	1	..	..	..	1 0 0	..
Neglecting to repair surface after notice	2	..	2	1	..	..	..	..	..	..	35 0 0	6 6 0
Neglecting to repair yard surface after notice	2	..	2	1	..	..	..	..	..	..	13 10 0	2 17 6
Not having the names and addresses of landlords and/or Medical Officer of Health in rent books	27	..	27	25	..	2	1	..	1	..	0 10 0	0 10 6
Officer of Health in rent books	1	..	1	1	..	..	..	..	..	..	7 0 0	0 4 0
Neglecting to cleanse workshop after notice	2	..	2	1	..	..	1	..	..	..	3 5 0	..
Not having the permitted number of occupants entered in the rent book	2	..	2	1	..	..	..	..	..	..	0 10 0	..
Neglecting to cleanse dirty bakehouse	7	..	6	..	2	6	5	..	1	..	0 10 0	..
Infringements of the Rag Flock Acts, 1911 and 1928	7	..	..	..	1	..	..	..	..	..	13 10 0	2 17 6
Selling an article of food which was not of the quality demanded by the purchaser	12	..	12	..	..	12	7	..	2	3	0 10 0	0 10 6
Adding an injurious ingredient to an article of food	1	..	1	..	..	1	1	..	..	..	7 0 0	0 4 0
Neglecting to maintain means of escape in case of fire in a satisfactory condition	6	..	3	..	3	3	3	..	..	*1	3 5 0	..
Establishing an offensive trade without the consent of the local authority	7	..	4	..	3	4	3	..	..	..	0 10 0	..
Distributing toys from vehicles used for the collection of rags	2	..	2	..	..	2	2	..	..	..	0 10 0	..
Employing a shop assistant on the weekly half-holiday	2	..	2	..	..	2	2	..	..	..	0 10 0	..
Failing to keep prescribed record showing hours worked, intervals for meals, and particulars of overtime <i>re</i> Young Persons	2	..	2	..	..	2	2	..	..	..	0 10 0	..
Selling poisons without having name entered on list of sellers of Part II.	3	..	3	..	..	3	2	..	..	1	1 0 0	..
Poisons, kept by the local authority	6	..	6	..	..	6	4	..	..	2	5 10 0	..
Not having name and address on container of Part II. Poison	11	..	11	11	..	11	..	..	..	..	..	..
Houses Let-in-lodgings:—	13	..	13	13	..	13	..	..	..	..	..	..
Failing to furnish particulars	12	..	12	12	..	12	..	..	..	..	..	..
Dirty walls, floors, or bedding	12	..	12	12	..	12	..	..	..	..	..	..
Non-compliance with notices to provide water supply, and sinks	3	..	3	3	..	3	..	..	..	..	..	..
Non-compliance with notices to provide adequate means of ventilation	38	38	..	..	..	..	..	..	..	..	..	..
Allowing smoke to be emitted from chimneys, of premises other than dwelling-houses	4	..	4	..	..	4	..	..	1	..	..	0 16 0
Allowing smoke to be emitted from chimneys of premises other than dwelling-houses after notices	60	..	30	..	30	30	30	..	..	..	53 0 0	..
Allowing smoke to be emitted from chimneys of premises other than dwelling-houses after Magistrate's Orders to abate nuisance	..	..	..	..	..	..	..	..	..	..	..	..

* Adjourned *sine die*.

TABLE No. 8.
PUBLIC CONVENIENCES—RECEIPTS AND EXPENDITURE—YEAR ENDING 31ST MARCH, 1938.

SITUATION OF CONVENIENCE	Original Cost of Construction	Wages and Clothing	Electricity, Gas, Water, Repairs, etc.	Amount received for Use of Water closets	Amount received for Use of Lavatories	Amount received for Left Parcels	Amount received from Sale of Sanitary Towels	Commission on Receipts from Weighing Machines	Total Receipts	Total Expenditure	Surplus	Deficit
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Albert Square .. Ladies	2730 6 11	286 17 2	88 14 8	195 12 3	7 1 6	3 14 0	7 7 2	2 2 9	215 17 8	375 11 10	..	159 14 2
" .. Gents.	2299 7 10	460 12 0	103 7 5	196 13 3	43 11 10	21 5 2	..	0 11 1	262 1 4	563 19 5	..	301 18 1
Alexandra Park { Ladies	1560 2 1	{ 204 12 1	32 10 10	19 16 1	0 4 2	..	1 8 6	..	21 8 9	237 2 11	..	215 14 2
" { Gents.		{ 29 6 8	7 3 10	15 1 4	..	..	..	..	15 1 4	36 10 6	..	21 9 2
All Saints .. { Ladies	6383 2 0	{ 276 9 2	76 3 8	112 6 11	4 18 2	1 15 8	3 14 6	2 15 6	125 10 9	352 12 10	..	227 2 1
" { Gents.		{ 459 14 8	92 2 6	89 7 0	19 15 8	7 14 2	..	18 5 8	135 2 6	551 17 2	..	416 14 8
Ardwick Green .. Ladies	605 10 7	272 4 2	73 0 7	76 1 4	7 2 0	1 4 8	2 10 8	0 18 8	87 17 4	345 4 9	..	257 7 5
a Barlow Moor Rd. { Ladies	540 0 0	{ 87 3 2	51 12 7	30 17 8	..	..	..	..	30 17 8	138 15 9	..	107 18 1
" { Gents.		{ 87 3 2	51 12 9	18 4 3	..	..	..	6 2 11	24 7 2	138 15 11	..	114 8 9
c Blackley .. { Ladies	959 8 9	204 12 1	116 12 1	32 16 10	0 14 0	0 0 10	0 14 0	0 10 2	57 18 6	321 4 2	..	263 5 8
" { Gents.	1026 12 9	456 7 0	49 15 11	13 17 4	1 12 8	0 12 2	..	3 18 7	20 0 9	506 2 11	..	486 2 2
Butler Street .. { Ladies	2392 10 8	{ 204 12 1	29 12 9	8 16 0	0 2 4	..	1 1 10	6 14 3	10 0 2	234 4 10	..	224 4 8
" { Gents.		{ 342 1 6	30 0 6	10 15 6	1 0 2	..	..	..	18 9 11	372 2 0	..	353 12 1
d Cheetham .. { Ladies	1573 2 1	{ 204 12 1	42 16 4	18 18 5	0 13 0	..	0 15 10	2 11 5	20 7 3	247 8 5	..	227 1 2
" { Gents.		{ 342 1 6	44 5 0	18 9 2	2 15 2	..	..	..	23 15 9	386 6 6	..	362 10 9
e Chorlton { Ladies	729 9 6	{ 33 4 8	8 3 10	12 0 9	..	..	..	..	12 0 9	41 8 6	..	29 7 9
(Seymour Grove) { Gents.		{ 20 4 8	6 19 9	8 13 9	..	..	..	..	8 13 9	27 4 5	..	18 10 8
f Corporation Street (Gents.)	2364 10 9	459 14 8	80 1 5	55 15 6	9 4 2	3 10 8	..	3 14 1	72 4 5	539 16 1	..	467 11 8
Dean Lane .. { Ladies	1121 0 0	{ 204 12 1	31 7 6	28 8 8	0 5 8	0 8 6	1 15 2	1 5 10	32 3 10	235 19 7	..	203 15 9
" { Gents.		{ 20 4 8	13 12 1	9 16 3	..	..	..	..	9 16 3	33 16 9	..	24 0 6
Denmark Road { Ladies	1260 5 1	{ 204 12 1	33 18 9	26 19 0	1 12 6	..	0 18 10	5 12 1	29 10 4	238 10 10	..	209 0 6
" { Gents.		{ 20 4 8	9 13 2	21 6 4	26 18 5	29 17 10	..	2 19 5

(Continued.)

TABLE NO. 8.—*continued*

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SITUATION OF CONVENIENCE	Original Cost of Construction	Wages and Clothing	Electricity, Gas, Water, Repairs, etc.	Amount received for Use of Water closets	Amount received for Use of Lavatories	Amount received for Left Parcels	Amount received from Sale of Sanitary Towels	Commission on Receipts from Weighing Machines	Total Receipts	Total Expenditure	Surplus	Deficit
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
<i>d</i> Gorton Lane .. {Ladies Gents.	} 403 19 8	{ 272 4 2 39 9 0	27 16 11 11 14 6	10 14 0 6 16 9	0 4 2 ..	..	..	..	62 4 5 6 16 9	300 1 1 51 3 6	..	237 16 8 44 6 9
<i>e</i> Gorton Town Hall {Ladies Gents.	.. 550 0 0 .. 820 0 0	147 13 2 37 2 8	33 4 8 17 18 9	56 6 9 29 11 8	1 0 0 ..	..	0 19 6 ..	1 15 0 7 11 3	60 1 3 37 2 11	180 17 10 55 1 5	..	120 16 7 17 18 6
Great Bridgewater St. (Gents)	.. 1711 18 9	346 6 6	99 11 8	121 2 3	43 9 6	..	..	21 16 7	186 8 4	445 18 2	..	259 9 10
<i>f</i> Kitchen Bank (Ladies) ..	.. 776 7 4	204 12 1	43 17 4	24 18 5	0 6 6	0 11 10	1 5 8	..	40 17 5	248 9 5	..	207 12 0
Knott Mill (Ladies).. ..	.. 861 2 0	204 12 1	37 4 10	15 11 2	0 12 2	..	1 11 2	..	17 14 6	241 16 11	..	224 2 5
<i>g</i> Levenshulme .. {Ladies Gents.	} 499 0 7	{ 272 4 2 39 9 0	113 17 8 25 13 9	47 15 1 19 15 11	0 14 0 ..	3 10 6 ..	2 16 8 ..	9 1 10	94 16 3 28 17 9	386 1 10 65 2 9	..	291 5 7 36 5 0
Lloyd's Hotel (Gents) ..	.. ..	11 15 8	23 17 3	10 0 8	..	..	..	..	10 0 8	35 12 11	..	25 12 3
Longsight (Gents) .. ..	.. 260 14 1	43 7 0	24 0 6	25 1 5	..	..	..	4 14 6	29 15 11	67 7 6	..	37 11 7
Market Place (Gents) ..	.. 1035 9 5	482 5 2	134 15 9	249 13 0	67 17 6	..	..	..	317 10 6	617 0 11	..	299 10 5
Midway Hotel (Gents) ..	.. 247 2 4	11 15 8	10 5 5	4 6 9	..	..	..	..	4 6 9	22 1 1	..	17 14 4
<i>h</i> Middleton Road (Gents)..	.. ..	0 10 4	13 9 8	1 11 8	..	..	..	..	1 11 8	14 0 0	..	12 8 4
<i>e</i> Moston Lane .. {Ladies Gents.	} 461 9 0	{ 20 4 8 20 4 8	21 15 2 20 17 2	4 19 11 ..	..	..	..	..	4 19 11 ..	41 19 10 41 1 10	..	36 19 11 41 1 10
New Cross .. {Ladies Gents.	.. 1615 5 5 .. 1755 5 1	276 9 2 482 5 2	87 6 11 90 8 6	108 8 0 107 1 2	5 12 10 27 6 0	3 9 4 ..	7 13 2 ..	1 3 2 16 19 3	126 6 6 151 6 5	363 16 1 572 13 8	..	237 9 7 421 7 3
North Road (Ladies) ..	.. 521 4 9	33 4 8	17 5 7	4 9 8	..	..	..	..	4 9 8	50 10 3	..	46 0 7
Northenden .. {Ladies Gents.	} 545 0 0	{ 25 7 1 25 7 1	14 10 8 11 13 7	24 10 6 11 3 2	..	..	..	1 4 3 3 18 8	25 14 9 15 1 10	39 17 9 37 0 8	..	14 3 0 21 18 10
Openshaw .. {Ladies Gents.	} 1255 8 1	{ 204 12 1 20 4 8	41 9 7 17 5 4	18 0 6 ..	0 2 0 ..	..	0 12 6 ..	4 7 3	18 15 0 4 7 3	246 1 8 37 10 0	..	227 6 8 33 2 9

(Continued.)

TABLE No. 8.—continued

SITUATION OF CONVENIENCE	Original Cost of Construction	Wages and Clothing	Electricity, Gas, Water, Repairs, etc.	Amount received for Use of Water closets	Amount received for Use of Lavatories	Amount received for Left Parcels	Amount received from Sale of Sanitary Towels	Commission on Receipts from Weighing Machines	Total Receipts	Total Expenditure	Surplus	Deficit
Piccadilly { Ladies Gents. }	£ s. d. 887 12 9 1384 14 5	£ s. d. 365 10 11 561 3 2	£ s. d. 138 5 8 279 4 11	£ s. d. 913 3 5 535 12 1	£ s. d. 48 3 6 161 10 6	£ s. d. 77 1 6 207 15 8	£ s. d. 25 10 0	£ s. d. 6 15 4 81 2 4	£ s. d. 1070 13 9 986 0 7	£ s. d. 503 16 7 840 8 1	£ s. d. 566 17 2 145 12 6	£ s. d.
Queen's Road { Ladies Gents. }	1110 1 10	{ 33 4 8 20 4 8 }	10 8 10 23 3 2	12 16 9 16 5 11	.. ..	.. ..	.. ..	0 18 11 7 16 4	13 15 8 24 2 3	43 13 6 43 7 10	.. ..	29 17 10 19 5 7
Shudehill (Gents)	1631 9 3	437 4 0	131 11 11	71 17 0	11 4 0	12 14 2	.. ..	3 3 10	98 19 0	568 15 11	.. ..	469 16 11
e Southern Cemetery { Ladies Gents. }	81 17 4	{ 26 14 8 26 14 8 }	16 9 6 17 4 9	18 11 2 8 7 3	.. ..	.. ..	.. ..	5 11 7	18 11 2 13 18 10	43 4 2 43 19 5	.. ..	24 13 0 30 0 7
South Street (Gents)	1615 7 6	323 15 10	69 0 8	63 7 0	11 10 4	.. ..	.. ..	5 13 10	80 11 2	392 16 6	.. ..	312 5 4
Stevenson Square { Ladies Gents. }	1605 16 11 1724 16 11	276 9 2 459 14 8	103 11 0 97 17 7	173 3 7 129 13 7	7 15 8 33 8 4	11 11 2 51 13 6	11 11 2	1 15 1 8 14 0	206 0 0 223 9 5	380 0 2 557 12 3	.. ..	174 0 2 334 2 10
Victoria Buildings (Ladies) ..	630 6 10	646 9 8	139 4 6	559 14 11	47 8 8	124 18 7	24 8 0	8 14 2	765 4 4	785 14 2	.. ..	20 9 10
*mVictoria Street (Gents)	2196 15 3	207 7 2	95 11 4	63 13 9	14 17 0	19 3 10	.. ..	4 9 9	102 4 4	302 18 6	.. ..	200 14 2
Wellington Hotel (Gents) ..	86 4 1	11 15 7	5 3 1	5 6 7	.. ..	.. ..	.. ..	.. ..	5 6 7	16 18 8	.. ..	11 12 1
West Point { Ladies Gents. }	1288 13 7	{ 29 19 7 29 19 7 }	8 2 6 8 10 3	19 11 9 13 0 9	.. ..	.. ..	.. ..	0 17 0 7 5 3	20 8 9 20 6 0	38 2 1 38 9 10	.. ..	17 13 4 18 3 10
Withington.. .. { Ladies Gents. }	1516 19 3	{ 208 10 3 33 4 7 }	69 4 1 14 2 10	40 10 10 14 10 5	1 0 4	1 13 6	1 19 10	1 5 11 8 15 2	46 10 5 23 5 7	277 14 4 47 7 5	.. ..	231 3 11 24 1 10
Public Urinals .. ..	.. ..	1865 10 11	1176 10 8	.. ..	.. ..	.. ..	.. ..	9 0 5	9 0 5	3042 1 7	.. ..	3033 1 2
Proportion of Cost of Maintenance of Joint Tram Shelters, etc., received from Transport Department ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	115 0 11	.. ..	115 0 11	.. ..
Proportion of Cost of Maintenance of Public Conveniences, Chorlton (Seymour Grove), received from Stretford M.B. .. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	23 19 9 5 16 7	.. ..	23 19 9 5 16 7	.. ..
Sundry Receipts .. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..
TOTALS	55355 11 5	13666 5 8	4416 16 4	4581 18 9	584 16 0	554 12 9	98 14 2	289 13 8	6382 16 6	18013 2 0	857 6 11	12557 12 5

a Joint Tramway Offices and Convenience. Cost of erection and maintenance apportioned between Transport and Public Health Committees.
b Stretford M.B. paid half cost of construction and maintenance and received half receipts.
c Total receipts include £25 rent for portion of premises.
d Total receipts include £51 6s. 3d. rent for portion of premises.
e Total receipts include £13 15s. rent for portion of premises.
f Total receipts include £40 rent for portion of premises.
g Expenditure includes £11 0s. 9d. rent for premises opened 6th Sept., 1937.
* Re-opened after reconstruction 13th October, 1937.

Donations included in 1937-38: £100 10s. 6d. for the erection of a public lavatory at the Victoria Buildings, £10 10s. 6d. for the erection of a public lavatory at the Victoria Buildings, £10 10s. 6d. for the erection of a public lavatory at the Victoria Buildings.

HOUSING ACT, 1936. SLUM CLEARANCE.

Representations.

During the year, seven areas in various parts of the city embracing the total of 3,403 houses and 22 individual houses found to be unfit for human habitation have been represented to the City Council, namely, Sandy Lane, Bradford Road, St. George's, Hutchins Street, Harpurhey, Moston Lane, and Oldham Road.

Inquiries.

Inquiries have been held by the Ministry of Health into four clearance areas, namely, Dean Street, Sandy Lane, Old Moat Lane, and Ardwick, totalling 942 houses. Confirmation has been received in respect of the Dean Street Clearance Area.

Preparation of evidence for Inquiries.

In the case of the Ardwick Clearance Area the inspections and preparation of evidence were completed before the passing of the Housing Act, 1936, which excluded from clearance areas premises included under the 1930 Act on the ground of bad arrangement only. Additionally, it was found that due to the lapse of time since the inspections and evidence were completed many properties had been sold or transferred to other owners, so that practically the whole of the evidence for the Ardwick Clearance Area had to be revised. Full preparations were also made for the holding of the Inquiry into the New Cross Clearance Area which it was found impracticable to hold during 1937.

Overcrowding provisions.

1,894 visits have been paid to houses either for the abatement of overcrowding or the measurement of rooms to ascertain the "permitted number" of occupants for houses newly erected or old houses which have been converted into flats suitable for occupation by the working classes.

The following is a summary of the total visits paid by the housing staff during the year :—

Clearance Areas, primary inspections	1,633
,, ,, re-inspections	2,813
,, ,, ascertainment of families to be removed for the Town Clerk	812
,, ,, arranging the removal of families	1,513
,, ,, supervising the removal of furniture from the old houses and delivery to the new houses	1,479
,, ,, fumigation of houses	1,504
,, ,, demolition of property	1,363
Compulsory Purchase Orders.—Entering and taking possession on behalf of the Corporation as authorised by the Town Clerk in accordance with the notices of entry served upon the owners and occupiers	720
Outside Clearance Areas.—Fumigation of houses	77
Abatement of overcrowding, and measurement of houses for permitted numbers	1,894
	13,808

TABLE I.
HOUSING ACT, 1936, PARTS II. AND III.
Clearance Areas and Individual Houses Represented to the City Council.

Area	Represented Premises		Premises in the Area at the Making of the Order		Exclusions by the Ministry			Premises confirmed by the Ministry		Popula- tion	Families to be Re- housed	Date		
	Dwelling- houses	Business Premises	Dwelling- houses	Business Premises	Unconditionally	Dwelling houses	Business Premises	Dwelling- houses	Business Premises			Representa- tion	Enquiry by Ministry of Health	Confirmation Order
Hulme	1,076	62	1,076	62	15	—	—	1,061	42	4,397	1,243	27-7-32	25-7-33	7-11-33
Red Bank	366	17	366	17	1	—	—	365	7	1,701	531	8-9-33	11-9-34	8-11-34
West Gorton	390	26	391	26	16	—	—	375	21	1,833	444	8-9-33	12-6-34	29-9-34
Collyhurst	1,848	72	1,848	72	—	—	—	1,848	72	7,897	2,019	8-9-33	30-5-34	29-9-34
Ancoats	998	47	998	47	14	—	—	940	16	4,020	1,065	8-9-33	29-5-34	12-1-35
Miles Platting	712	47	721	32	8	44	—	688	9	2,615	691	18-9-34	22-10-35	27-2-36
Roger Street	32	3	32	—	—	25	—	32	—	145	35	29-3-35	31-3-36	31-8-36
Pottory Lane	51	3	52	—	—	—	—	52	—	197	55	29-3-35	31-3-36	31-8-36
Collyhurst II.	443	53	446	—	41	24	—	381	—	1,435	418	8-4-35	31-3-36	31-8-36
Wellington Street	22	—	22	—	—	—	—	22	—	65	22	16-9-35	31-3-36	31-8-36
St. Michael's	290	34	289	—	9	5	—	275	—	1,214	427	15-10-35	14-7-36	31-10-36
Ardwick	909	42	907	—	—	—	—	—	—	3,698	1,071	4-12-35	23-11-37	—
Culcheth Brow	18	—	18	—	—	—	—	18	—	80	20	12-12-35	6-10-36	3-11-36
Cresswell Street	12	—	12	—	—	—	—	12	—	53	12	9-1-36	6-10-36	3-11-36
Joddrell Street	10	—	10	—	—	—	—	10	—	34	13	14-2-36	6-10-36	3-11-36
Stuart Street	102	—	102	—	2	—	—	100	—	375	100	14-2-36	6-10-36	3-11-36
Old Moat Lane	14	—	14	—	—	—	—	—	—	39	15	14-2-36	23-11-37	—
New Cross	1,855	62	1,825	—	—	—	—	—	—	7,273	2,032	12-3-36	—	—
Dean Street	13	2	13	—	—	—	—	13	—	26	9	24-6-36	10-8-37	19-10-37
Sandy Lane	6	—	6	—	—	—	—	—	—	10	4	13-1-37	23-11-37	—
Bradford Road	1,858	—	—	—	—	—	—	—	—	7,070	1,954	10-6-37	—	—
St. George's	1,188	—	—	—	—	—	—	—	—	4,156	1,181	19-10-37	—	—
Hutchins Street	61	—	—	—	—	—	—	—	—	220	62	14-12-37	—	—
Harpurhey	284	—	—	—	—	—	—	—	—	1,042	299	14-12-37	—	—
Moston Lane	3	—	—	—	—	—	—	—	—	14	3	14-12-37	—	—
Oldham Road	3	—	—	—	—	—	—	—	—	12	3	14-12-37	—	—
Individual Houses ..	57	—	—	—	—	—	—	57	—	197	50	—	—	—
	12,621	470	9,148	256	106	98	—	6,249	167	49,818	13,778	—	—	—

The number of dwelling-houses demolished and the number of persons displaced from those houses by the end of 1937 under the Housing Act, as submitted on Form H 256 to the Minister of Health in respect to Clearance Areas and Individual Houses, are :—

	Dwelling-houses Demolished	Persons Displaced
Clearance Areas	4,218	17,907
Individual Houses	42	150

In addition to these, 148 dwelling-houses were demolished voluntarily by owners without formal action under the Housing Act, 1936.

TABLE II.

Families and Persons Rehoused from Clearance Areas and Individual Houses. Parts II. and III. of the Housing Act, 1936, up to 31st December, 1937.

REMOVALS.

Description	At Cost of City Council				At no Cost to the City Council		Total	
	Verminous—Disinfested during Transit		Non-verminous—Transferred Without Disinfestation		Removal Effected Privately			
	Families	Persons	Families	Persons	Families	Persons	Families	Persons
Hulme Clearance Area	844	3,415	60	191	167	643	1,071	4,249
Collyhurst Clearance Area	1,750	6,780	8	20	171	677	1,929	7,477
West Gorton Clearance Area	352	1,382	6	13	31	118	389	1,513
Red Bank Clearance Area	177	633	—	—	351	1,065	528	1,693
Ancoats Clearance Area	833	3,154	1	3	122	459	956	3,616
Miles Platting Clearance Area	379	1,447	—	—	44	164	423	1,612
Roger Street Clearance Area	23	95	—	—	9	39	32	134
Pottery Lane Clearance Area	48	161	—	—	5	22	53	183
Wellington Street Clearance Area	10	30	12	32	—	—	22	62
Culcheth Brow Clearance Area	8	32	—	—	4	18	12	50
Cresswell Street Clearance Area	7	30	—	—	3	14	10	44
Joddrell Street Clearance Area	6	22	—	—	3	11	9	33
Stuart Street Clearance Area	84	314	—	—	10	46	94	360
Collyhurst II. Clearance Area	3	17	—	—	1	2	4	19
St. Michael's Clearance Area	—	—	—	—	16	71	16	71
Individual Houses	17	70	15	54	16	64	48	188
Totals	4,541	17,582	102	313	953	3,414	5,596	21,309

In addition the following families, whose effects were verminous, have been removed and disinfested at the request of the Housing Director from houses not situated in Clearance Areas to Corporation houses.	1932	10	69
	1933	16	95
	1934	140	691
	1935	124	578
	1936	231	1,032
	1937	387	1,675
	Total	6,504	25,449

ERADICATION OF BED BUGS.

Particulars with regard to the action taken for the eradication of bed bugs during the year are as follows :

	Number found to be infested, 1937	Number of houses disinfested includes carry overs from 1936
Council houses	486	450
Other houses	1,323	1,726
	1,809	2,176

Of the houses disinfested during the year 431 Council houses and 1,581 other houses were fumigated with hydrocyanic acid gas (HCN), a total of 2,012 houses. The balance was dealt with by sulphur compounds, or contact insecticides.

All verminous furniture and effects of families entering Corporation houses, whether from clearance areas or from houses not situate in clearance areas, are subjected to a two per cent. concentration of hydrocyanic acid gas.

All tenants occupying vermin infested houses in clearance areas are informed of the danger of carrying vermin to their new houses and are advised to accept the voluntary system of cleansing which is available to them at the Monsall Disinfecting Station on the day of their removal where they can bathe and have their clothing cleansed.

After removal into Corporation houses occasional supervision is maintained when this is deemed to be necessary to prevent re-infestation, and advice is always given with regard to the danger of buying second hand furniture.

Hydrocyanic acid gas is employed for the majority of disinfestations which are carried out by fumigation contractors. In a few instances where cyanide would have been unsuitable sulphur and contact insecticides have been used by the local authority.

ABATEMENT OF OVERCROWDING.

The present position with relation to the abatement of overcrowding is as follows :—

On the completion of the survey, the permitted numbers of occupants of dwelling-houses were sent to the owners. There was an immediate response from the owners who sent a statement giving a list of the houses where overcrowding had been abated.

At the time of the survey 3,957 houses were overcrowded. Of these, 192, or 4·8 per cent., were abated before the appointed day—January 1st, 1937—so that the number of overcrowded houses on this date was 3,765. To this figure have been added 667 cases which have become overcrowded owing to the advancing age of children, making a total of 4,432 overcrowded houses.

Each quarter day a circular letter enclosing a list in duplicate of overcrowded houses has been sent to the owners of such houses. The returned lists show that 2,110 cases have been abated, leaving a balance of 2,322 overcrowded houses on 31st December, 1937.

The following table sets forth the position at the end of each year.

Year	1936	1937
Overcrowded at the time of survey	3,957	—
Overcrowded on 1st January	—	3,765
Became overcrowded during the year	—	667
Overcrowding abated during the year	192	2,110
Overcrowded houses 31st December	3,765	2,322

During the year 1,782 houses have been visited and measured to assess the permitted number of occupants; 112 allegations of overcrowding have been investigated and appropriate action taken.

STATEMENT OF THE WORK OF THE SPECIAL INSPECTORS, 1937.

The following statement shows the work done by the two Special Inspectors during the year under review, and comments on certain sections of the work are appended:—

Number of Visits re:—

Shops Act, 1934	97
Food poisoning	72
Export of washed rags, paper, etc.	61
Vermin—Infested premises	183
Institutions	86
	— 269
Nuisances	11
Public Health Laboratory	121
Public Health Exhibitions	24
Water purification in swimming baths	287
Nursing Homes	64
Miscellaneous	139

Samples submitted to the Public Health Laboratory:—

Water from Swimming Baths and Pools—

Bacteriological	.. .. .	117
Chemical	.. .. .	35
		— 152
Substances in Food Poisoning Cases	.. .. .	34

Tests of Water from the Swimming Baths and Pools—

Carried out by the Special Inspectors	141
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Swimming Baths.

By the courtesy and co-operation of the General Superintendent of the Baths and Washhouses Department, the Medical Officer of Health has been enabled to continue the supervision and scientific control of the purity of the water of the swimming baths belonging to the City, as required in the circular and report issued by the Ministry of Health on this subject. Quarterly visits of inspection have been made to all the baths, and samples of water were taken for bacteriological examination at the Public Health Laboratory. Samples of water were also examined at the baths by the Special Inspectors to determine the degree of alkalinity, and the amount of free chlorine present in the water. These samples were taken from a point over the outlet of the various baths, so that it is reasonable to claim that the conditions in the bath as a whole are at least as good as, if not better than, the conditions recorded.

The following table gives a comparison between the results of this year's tests and the conditions prevailing prior to the issue of the recommendations by the Medical Officer of Health in 1936. Considerable improvement is shown, particularly in the *B. coli* counts, but more uniformity is possible. The later samples show by an improvement on the averages given in the table that, as the recommendations are more completely understood and operated, a high standard of purity is certainly attainable.

COMPARISON OF RESULTS OF SAMPLES OF WATER FROM
SIXTEEN SWIMMING BATHS.

	January, 1934, to January, 1936		January, 1937, to December, 1937	
	Number of Samples	Percentage	Number of Samples	Percentage
Number of samples in which—				
B. Coli were found in 1 cc. ..	15	10·4%	2	3·3%
B. Coli. were found in 10 cc...	37	25·7%	6	10·0%
B. Coli were found in 100 cc.	42	29·2%	—	—
B. Coli were absent in 100 cc.	50	34·7%	52	86·7%
Total	144	100·0%	60	100·0%
Number of samples in which free chlorine was absent or present only as a trace ..	128	89%	21	35%
Average count of ærobic organisms grown on agar from 1 cc. of water (48 hours at 37° C.)	100,000		57,000	
Highest count	Over 2,000,000		328,000	
Lowest count	2		0	

Of the 60 samples taken during the year under review, 23, or 38 per cent., showed counts on agar (48 hours at 37° C.) of less than 10 organisms per cc. Further, at eight of the baths, viz., Chorlton, Gorton, Newton Heath, Osborne Street, Leaf Street, Victoria, New Islington, and Whitworth (Openshaw), the tests showed the absence of B. Coli in 100 cc. in all samples taken during the year.

The private swimming baths have been similarly visited. There has been considerable improvement in the condition of these baths during the past year. The results show that in three out of four samples B. Coli were absent in 100 cc. The ærobe counts fluctuated considerably, but were an improvement in general on previous results.

An investigation of the condition of the swimming pools in the parks was also undertaken during the year. Action with regard to these is still under consideration.

Export of Washed Rags, etc.

Inspection of these materials is carried out as a hygienic measure properly coming within the scope of the department, and to assist business firms in attaining the standard of cleanliness required by the regulations imposed by importing countries of such materials.

The inspections are made periodically to supervise the type of plant and its use, and, on request, to see and pass consignments before dispatch. Each bale is certified by being stencilled with the following mark :—M.O.H.
M/R.

The following table gives the quantities of materials thus dealt with, and is some indication of the amount of work involved :—

	1937	1936	1935	1934
	Tons	Tons	Tons	Tons
New fents	2	3	4	—
Meat cloths	40	20	24	22
Washed rags	104	131	58	16
Hemp twines and sacking ..	20	—	65	86
Waste paper	—	57	280	—
Clippings and artificial silk ..	102	—	—	—
Second-hand clothing	1	1	5	1

RATS AND MICE (DESTRUCTION) ACT, 1919.

The number of primary complaints received was 555, and is the highest number for any year. The total number of premises involved in connection with the complaints was 2,157, the lowest number dealt with in any year since 1926 ; consequently the number of premises involved per complaint has fallen from an average of 6·08 to 3·88. This is brought about mainly by the increase in the number of complaints of infestation by mice only ; such infestations having risen to 440 compared with a yearly average of 278, and in the majority of business premises infested with mice the infestation did not affect adjacent premises.

In addition to the above, 93 complaints of further infestation of premises already under observation were investigated, making a total of 648 complaints dealt with in the year.

Conditions found.

Primary inspections were made at 2,157 premises. 1,553 were infested with rats, 440 infested with mice, and at 164 premises no evidence of rats or mice could be found.

At 479 (30·84 per cent.) of the rat-infested premises, rats had obtained ingress to the buildings, and at 1,074 (69·16 per cent.) premises the infestation was confined to yards, passages, land, and gardens.

The conditions found and the type of premises infested are shown in Table I.

Causes of Infestation.

Infestations were found to be directly due to, or associated with, defective or disused drains or sewers in 64·78 per cent. of the rat-infested premises, in 59·5 per cent. of premises affected by interior infestation, and in 67·1 per cent. of cases where infestation was confined to yards, passages, etc. In the remainder of the premises visited infestation was due to such causes as : nature of business carried on, deposit of refuse, improper storage of food and waste materials, property in the vicinity of demolitions, new housing estates, watercourses, etc. In only 0·38 per cent. of infested premises was the cause of infestation not determined.

A classification of the causes of infestation will be found in Table II.

Nature of Business carried on at Infested Premises.

Of the 209 business premises affected by interior infestation, 50 or 23·9 per cent. were premises in which food was prepared, stored, or sold ; and 145 or 69·3 per cent., were shops, workshops, factories, warehouses, or other places in which the attraction to rats was the scrap food and food paper wrappings thrown about the floors or left unprotected about the premises.

Details of the nature of premises infested are shown in Table III.

Repressive Measures.

Occupiers are encouraged to carry out the trapping of rats themselves, but in premises where occupiers cannot carry out such measures effectively, or where the premises are badly infested, the employment of an experienced rat-catcher is advised. In necessitous cases, traps are loaned to occupiers. Advice is given by the visiting officer on such matters as :—

Methods to employ for the destruction of rats, the examination of undermined surfaces and tracing of rat burrows, elimination of harbouring places, removal of accumulations of lumber or rubbish, protection of food stocks and food scraps, and rat-proofing of the premises. Concerted action is arranged in all adjacent infested premises.

Repeated visits are made to ensure that the measures are being carried out in an efficient manner, the Rat Officers having made 2,878 such revisits during the year.

Destruction.

As there are no available means of ascertaining the measures taken by the general public, in cases not brought to the notice of the department, it is not possible to estimate the total number of rats destroyed in the City, but professional rat-catchers have been employed at 379 premises and have certified to the destruction by them of 4,504 rats and 3,281 mice, and of 39,440 poison baits laid 28,790 are said to have been taken. In addition, the various Corporation departments have carried out the destruction of rats and mice on lands, buildings, and in sewers under their control, as follows :—

Poison baits laid	62,270
Poison baits taken (<i>i.e.</i> , 73 per cent. of the baits laid were taken)	45,620
Rats killed by means other than poison .	4,346
Mice destroyed	538

The poison baits were laid mainly in the sewers by the Highways Department. The result of such measures can only be judged by the report of the Rivers Department that “ The number of dead rats arriving with the sewage, particularly following a storm, is very noticeable, although the proportion of these casualties due to drowning or to the taking of baits laid by the Highways Department in sewers upstream has not been determined.

Prevention of Re-infestation.

This is of primary importance. Repressive measures which do not include the proofing of the building against the ingress of rodents can only be considered as of a temporary nature. Among these measures may be mentioned :—

- (1) Remedying of defects found in the drainage system.
- (2) Sealing of open pipe tracks and holes in walls, floors, and ceilings, and, where necessary, the fixing of rat guards on rainwater, soil, and wastepipe stacks to prevent rats climbing on to roofs or upper floors.
- (3) Guarding of basement windows, cellar areas, or ventilation openings at or near ground level.
- (4) Protection of short or gnawed door bases with sheet metal or other suitable material.

Rat-proofing was carried out at 1,285 premises during 1937 ; at 639 premises by the occupiers, at 641 premises by the owners, and at 5 premises by rat-catchers.

The condition of the structures of many of the older buildings in the city is such that to make them rat-proof would necessitate reconstruction. In such cases palliative methods only are practicable.

Measures carried out.

During the year 2,736 premises have been cleared of rats and mice, the highest number cleared in any one year since the Rats and Mice (Destruction) Act came into operation.

The position at the end of the year in connection with 3,381 other premises, dealt with for the presence of rats or mice, was as follows :—

	Premises
Repression work in progress by rat-catchers	235
Repression work in progress by owners or occupiers ..	758
Awaiting reports on condition of drains or sewers	551
Drain or sewer work done under observation	521
Condemned property	217
Other premises where repressive measures have been carried out and which are still under observation ..	1,099
Total	<u>3,381</u>

Particulars of the measures carried out during the year are detailed in Table IV.

Disinfestation and Recurrence.

In the period 1932 to 1936 inclusive, measures for the repression of rats and mice have been carried out in connection with 10,911 premises. At 10,795 premises (98·9 per cent.) there has been no complaint of re-infestation. Re-infestation has occurred at 319 premises in this period, and of these 203 have been dealt with and again reported clear, whilst in the remainder (116) repressive measures are still in hand.

In 206 of 311 recurrence cases dealt with in 1937 infestation was found to arise from the following causes :—

Subsequent development or discovery of defects in sewers	119 = 38·27%
Subsequent development or discovery of defects in external drains	54 = 17·37%
Subsequent development or discovery of defects in internal drains	33 = 10·62%
	<u>206 = 66·26%</u>

In 34 (10·9 per cent.) other cases not yet cleared up similar conditions are suspected.

The efficiency of the work done in each year during the period 1932 to 1936 is set out in Table V.

Tracing of Burrows in relation to Drainage Infestation.

In the course of 221 examinations of undermined surfaces made by owners and occupiers, the Highways Department, and the Drainage and Sanitary Sections of the Public Health Department, 254 defects were revealed in drains or sewers which, in the majority of cases, proved to be the cause of the infestation.

The conditions found and the action taken in connection with this portion of the work are shown in Table VI.

NATIONAL RAT WEEK—1ST TO 6TH NOVEMBER, 1937.

In accordance with a request contained in a circular-letter from the Ministry of Agriculture and Fisheries, relative to National Rat Week, the action taken and the results attending such action are as follows :—

Rat Week Propaganda.

Two hundred large posters, informing the public of their obligations under the Act and giving advice on methods to employ for the repression of rats and mice, were exhibited on hoardings and public places in the city, and 500 smaller posters were displayed in Corporation tramcars and buses from 27th October to 6th November. Suitable announcements were inserted in 11 newspapers. Editorials, on the object of National Rat Week, were arranged with the local press, and a full-page article was published in the October issue of "Better Health," 10,000 copies of which are distributed monthly in the city. One thousand circular-letters were sent to farmers and occupiers of other premises peculiarly liable to infestation by reason of the nature of the business carried on, and 200 letters were sent to chemists and hardware dealers asking them to make a special show of approved poisons and traps, and all Corporation departments were requested to co-operate.

Work directly arising from Rat Week Propaganda.

	National Rat Week, 1937	Weekly Average (excluding National Rat Week)
Number of complaints received from 27th October to 6th November	78	11·2
Premises visited in connection with complaints— In Rat Week 118 In week following Rat Week 119 —	237	36·5
Revisits to other premises known to be infested..	78	54

Conditions Found at Premises Visited on Complaints arising out of Rat Week Propaganda.

	Business Premises	Dwelling- houses	Totals
Interior Infestation	15	25	40
Exterior Infestation	21	59	80
Mice only	24	74	98
No evidence	2	17	19
Totals	62	175	237

Advice was given in all cases either by letter or verbally by the investigating officer.

Five professional rat-catchers reported having destroyed 443 rodents in the city during National Rat Week, and that 349 of 566 poison baits laid in infested premises were taken.

Repression Work by Corporation Departments during Rat Week.

The Highways, Rivers, Markets, Cleansing, and Parks, etc., Departments carried out special measures, which included the laying of 12,551 poison baits in the sewers, and of this number 9,138 (72·80 per cent) were known to have been taken.

TABLE I.

SUMMARY OF CONDITIONS REPORTED AND NUMBER OF PREMISES
VISITED FOR THE FIRST TIME DURING THE YEAR 1937.

Interior Infestation				Exterior Infestation		No Evidence of Infestation	
Rats		Mice					
Business Premises	Dwelling-houses	Business Premises	Dwelling-houses	Business Premises	Dwelling-houses	Business Premises	Dwelling-houses
209	270	138	302	225	849	27	137
919				1,074		164	
Total .. 2,157							

TABLE II.
CLASSIFICATION OF CAUSES OF RAT INFESTATION IN PREMISES
PRIMARILY VISITED IN 1937.

Cause of Infestation	Interior Infestation		Exterior Infestation		Totals	Per-centage
	Business Premises	Dwelling-houses	Business Premises	Dwelling-houses		
Directly due to or associated with disused or defective drains or sewers	107	178	145	576	1,006	64·78
Nature of business carried on in premises or vicinity	31	..	12	..	43	2·77
Tips, refuse dumps, market area, etc.	13	6	7	37	63	4·06
Neglect in protection of food scraps and wrappings, poultry kept, etc.	13	7	4	70	94	6·05
Dilapidated premises or defects in structures	16	11	6	7	40	2·57
New premises, housing estates, building operations, demolitions, etc.	4	32	9	75	120	7·73
Vicinity of open or culverted water-courses, railway cuttings, and sidings	22	18	37	73	150	9·66
Condemned property	3	12	5	11	31	2·00
Cause not determined .. .. .	..	6	..	..	6	0·38
Totals	209	270	225	849	1,553	100·00

ANALYSIS OF DRAINAGE INFESTATION.

Infestation	Business Premises		Dwelling-houses		Totals
	Interior	Exterior	Interior	Exterior	
Total number of primary investigations into rat infestation = 100 per cent. ..	209	225	270	849	1,553
Directly due to defective or disused drains or sewers	79	135	131	508	853
Associated with defective or disused drains or sewers	28	10	47	68	153
Total number of premises affected by drainage infestation	107	145	178	576	1,006
Percentage of drainage infestation in each group	51·19	64·44	65·92	67·84	64·78

TABLE III.
NATURE OF PREMISES INFESTED DURING THE YEAR 1937.

Particulars of Premises	Interior		Confined to Yards Passages, Gardens, or Adjoining Lands	Totals
	Rats	Mice	Rats	
<i>Restaurants.</i> —Public-houses, cafes, etc. ..	20	6	16	42
<i>Premises where food is prepared, stored, or sold.</i> —Grocers, butchers, fried fish shops, confectioners, ice-cream works, etc. ..	30	68	62	160
<i>Other premises attractive to rats.</i> —Garages, stables, marine stores, etc.	10	..	18	28
<i>Land.</i> —Allotments, parks, tips, etc. .. ..	..	..	12	12
<i>New buildings</i> —Building estates, etc. ..	1	..	10	11
<i>Factories and workshops.</i> —Joiners, plumbers, cabinet makers, clothing, boot repairs, printers, bookbinders, rubber, etc. ..	56	21	32	109
<i>Warehouses.</i> —Cotton, cloth, fruit, etc. ..	16	2	7	25
<i>Shops.</i> —Newsagents, outfitters, cycles, wines, hardware, gowns, chemists, bird dealer, etc.	41	30	50	121
<i>Institutions.</i> —Hospital, school	1	..	2	3
<i>Public halls.</i> —Church, cinemas, etc.	2	1	5	8
<i>Offices.</i>	18	9	3	30
<i>Unoccupied premises.</i> —Shops, offices, stables, etc.	14	1	8	23
<i>Dwelling-houses</i>	270	302	849	1,421
Totals	479	440	1,074	1,993

TABLE IV.
DESTRUCTION AND PREVENTION MEASURES CARRIED OUT DURING
THE YEAR 1937.

Measures carried out	By whom carried out	Business Premises	Dwelling-houses	Totals
Prevention only	Occupier	32	170	202
Destruction only	Occupier	60	276	336
	Rat-catcher	13	36	49
Destruction, Proofing, and Prevention	Occupier	244	343	587
	Rat-catcher	4	1	5
	Destruction by occupier, proofing by owner	58	55	113
	Destruction by rat-catcher, proofing by occupier	48	4	52
	Destruction by rat-catcher, proofing by owner	33	5	38
	Destruction by occupier, sewers by City Engineer's Department	173	691	864
	Destruction by occupier, drains by owner	104	386	490
	Totals	769	1,967	2,736

TABLE V.
PERCENTAGE EFFICIENCY AT THE END OF THE YEAR 1937 OF THE WORK
DONE IN EACH YEAR DURING THE PERIOD 1932 TO 1936.

Particulars	Year					Totals
	1932	1933	1934	1935	1936	
Number of premises reported clear of rats and mice	2,210	2,151	2,443	2,332	1,775	10,911
Number of premises at which reinfestation has occurred	128	93	47	42	9	319
Reinfested premises subsequently dealt with, again reported clear of rats and mice	93	65	15	23	7	203
Reinfested premises at which repressive measures are still in hand	35	28	32	19	2	116
Premises dealt with at which there is no further complaint of the presence of rats or mice	2,175	2,123	2,411	2,313	1,773	10,795
Percentage of efficiency of the work done at the end of the year 1937 ..	98.4	98.6	98.6	99.1	99.8	98.93

TABLE VI.

TRACING OF RAT BURROWS IN RELATION TO DRAINAGE INFESTATION.

Number of examinations made by	City Engineer 104	Owners and Occupiers 104	Drainage Section 1	Sanitary Section 12	TOTALS 221
<i>Conditions found or action taken.</i>					
Minor defects in sewers repaired	59	..	7	..	66
Disused privy midden drains removed ..	27	..	7	..	34
Other disused drains removed or otherwise dealt with	32	44	..	..	76
Defective outlet drains repaired by Cor- poration on owner's orders	7	3	2	..	12
Defective drains remedied by owners or dealt with by Sanitary Section	3	48	..	13	64
Street drain inlets repaired	2	..	..	..	2
Outward rat burrows consolidated	12	5	..	1	18
Surface rat burrows consolidated	14	36	..	..	50
Undermining due to causes other than rats	4	2	..	..	6
Totals	160	138	16	14	328

OTHER DRAINAGE EXAMINATIONS BY SANITARY SECTION MADE
DURING THE YEAR AT THE INSTANCE OF THE RAT SECTION.

Premises examined in consequence of suspected drainage infestation	38
Premises awaiting examination of drains in consequence of suspected drainage infestation	6
Premises at which drainage work required under notice has been completed during the year (includes work outstanding at the end of 1936)	49
Premises at which drainage work required under notice was in progress at the end of the year	10
Notices to repair defective drains served or in course of preparation ..	2

REPORT ON THE WORK OF THE CLEANSING
DEPARTMENT SUPPLIED BY THE DIRECTOR OF
PUBLIC CLEANSING.

DUTIES OF THE CLEANSING AUTHORITY.

The Cleansing of the City is under the control of the Cleansing Committee, which is responsible for the efficient management and transaction of all matters relating to the scavenging of the City and the performance of acts and duties in connection with every branch of City cleansing as directed by the various Acts of Parliament and Local Acts now in force. In addition, the Cleansing Committee undertakes, on behalf of the Markets Committee, the cleansing of the various public markets within the City.

For administrative purposes the Department is divided into two sections :—

1. House and Trade Refuse Section—to deal with the collection, removal, and disposal of household and other refuse arising from premises in the City and the cleansing of markets.
2. Street Cleansing Section—for the scavenging of the City, watering and gritting of roadways, clearance of snowfalls, etc.

Both these sections are co-ordinated in matters of supervision, intermobility of transport and man-power, disposal facilities, use of repair and maintenance centres, and in other similar ways.

EXTENT OF THE CLEANSING DEPARTMENT'S OPERATIONS.

The volume of work necessitated to carry out the Committee's obligations is indicated in the following table, showing the collection of refuse during the year ending 31st March, 1938:—

<i>House and Trade Refuse Section—</i>										<i>Tons</i>
Nightsoil	..	..	..	..	..	..	..	..	..	2,184
Slaughter-house Refuse	..	..	..	..	..	..	..	..	..	5,490
Bad Meat	..	..	..	..	..	..	..	..	..	349
Offal..	..	..	..	..	..	..	..	..	..	407
Fish ..	..	..	..	..	..	..	..	..	..	952
Ashes and Ashbin Refuse	..	..	..	..	..	..	..	..	..	172,384
Warehouse Refuse	..	..	..	..	..	..	..	..	..	12,503
Trade Refuse	..	..	..	..	..	..	..	..	..	10,545
Waste Paper ..	..	..	..	..	..	..	..	..	..	296
Stable Manure	..	..	..	..	..	..	..	..	..	637
Garbage ..	..	..	..	..	..	..	..	..	..	4,161
										<hr/> 209,908 <hr/>

Street Cleansing Section—

Loads

Street Sweepings 33,854

From the above will be gained some impression of the variety of refuse and the magnitude of the Department's operations. To illustrate this still more there are within the City 224,000 ashbins, each of which is required to be emptied at least once per week, so that this one operation alone involved no less than 11,648,000 individual house calls per annum. Similarly, the operations connected with street cleansing necessitated the sweeping of 977,936,960 square yards of surface, and the distribution of 6,510,500 gallons of water and 1,657 tons of sand and chippings on the roads, whilst over 850 tons of refuse had to be treated and disposed of every working day throughout the year.

Staff, Plant, Depots, etc.

The Committee employs, under the Director of Cleansing, a staff of about 67 officials and 1,426 workmen, and for the purpose of its work requires some 123 motor sweepers, refuse collection vehicles, tipping wagons, etc., 165 horses, a steam tug and fleet of 11 barges, about 65 heavy railway wagons, 4 small locomotives, and 251 light railway trucks. It utilises also 28 depots and 4 railway sidings and is landlord of four estates with a total area of 3,639 acres.

The Collection of Refuse from Streets and Premises.

The collection of refuse from the City streets and premises is a matter of careful and precise organisation. Both the streets to be swept and the premises to be visited are completely scheduled and receive attention at specified times on specified days each week. The interval between cleansings is never more than seven days, and in many cases in the centre of the City clearances are made several times during a week or even daily.

Refuse Disposal.

It will be appreciated that, from an administrative standpoint, it is the effective disposal of the great mass of refuse which so quickly accumulates in a large City rather than the collection which constitutes

the more difficult problem. As previously stated, there are over 243,000 tons of refuse for disposal per annum, or over 850 tons each working day, and, obviously, the sooner this waste matter, often deleterious in character, is completely disposed of in as hygienic a manner as possible, the better for general health, comfort, and well-being.

Methods of Refuse Disposal.

To an inland town there are generally four main methods of refuse disposal available, viz. :—

Disposal inside depot :—

1. Incineration.
2. Separation and Incineration.

Disposal outside depot :—

3. Land reclamation and sale to farmers.
4. Controlled tipping.

Taking the four above-mentioned methods *seriatim* they may be briefly described as follows :—

Incineration.

The refuse is delivered into the depot and after a very elementary separation of metals, brickbats, etc., is burnt in forced-draught furnaces or boilers.

Separation and Incineration.

This method treats the refuse, as received, by machinery designed to separate the refuse into various parts—firstly, to divide it into burnable and unburnable elements, and secondly, to extract such components as dust, cinders, metals, etc., with a view to further utilisation. As an inside depot method of disposal the separation method is more economical and has a number of other advantages over the older straight incineration method.

Land Reclamation.

Excellent examples of pure land reclamation are given by the Manchester Corporation's estates at Carrington and Chat Moss which, originally raw moss, have been converted into flourishing

agricultural communities producing a rental of more than £7,000 a year. Land reclamation such as this, however, is generally only commenced when an outlet is required for refuse having a manurial value, like the contents of the pail-closets, which are practically extinct to-day in Manchester.

Controlled Tipping.

This form of refuse disposal must not be confused with the ancient discredited open dumping. It is a modern, scientific, and hygienic method, consisting of depositing the refuse in layers of a specified depth and sealing each layer with earth or other suitable material at the end of the day, meanwhile taking certain precautions to prevent flies and vermin.

Extensive experiments and tests carried out by the technical staff of the Cleansing Department proved that controlled tipping was a safe and hygienic method of refuse disposal.

When properly carried out it gives an economic and highly efficient means of disposing of the refuse, and, as may be seen at various places within the Manchester boundary, this method is of great value in reclaiming otherwise waste lands (such as old quarries, land subject to flooding, etc.), which are easily converted into playing fields or pleasure grounds after the tipping and sealing have been completed.

The Future of Manchester Cleansing.

The Cleansing Committee is alive to the need for keeping up to date and has adopted a policy based on the slogan "Efficiency with Economy." In pursuance of this policy the Committee is gradually mechanising its transport; has installed three separation plants of the most modern type; looked after the welfare of its workmen by installing baths, wash-bowls, dining rooms, etc., at the depots; and, by using otherwise excessive space at certain depots to form flower beds and grass plots, has completely changed these depots from the old, drab, town's yards into places with some pretensions to beauty.

That the policy is a sound one is evidenced by the fact that the estimates for the current financial year, whilst providing for a standard of work equal to or better than any in the past, show a saving in cost over the average expenditure for the five years 1927 to 1931 of no less than £74,000 per annum.

The progressive programme of reorganisation and reconstruction throughout the Department, upon which, as indicated, a commencement has been made, will keep Manchester, it is believed, in the forefront of the world's cleansing authorities.

SPECIAL REPORT.

MANCHESTER AND DISTRICT REGIONAL SMOKE
ABATEMENT COMMITTEE.

The Honorary Secretary submits the following report on the work of the Committee during the year 1937 :—

Proposed South-East Lancashire Joint Smoke Abatement Board.

Members of the Committee are well aware of the reasons for the unavoidable delay in establishing the Joint Board which has been under consideration for some years. Further visits have been made by the Chairman of the Committee (Alderman Jackson) and the Honorary Secretary within the last few months, and representatives of authorities have been met, with the result that fourteen authorities have now agreed to support the proposal, some having passed resolutions that they are prepared to join the Board.

With the object of making some more definite progress, the Executive Committee decided that a conference of representatives of these authorities be convened, and this was held after the close of the year.

The following authorities were represented at the conference (12th April, 1938) :—

Manchester, Oldham, Hyde, Stockport, Stretford, Rochdale, Eccles,
Warrington Rural District Council, Farnworth, Kearsley,
Urmston, and Denton.

(Warrington County Borough has agreed to join, but representatives were unable to attend.)

At this conference the following resolutions were approved and adopted :—

- (1) That, in the opinion of the representatives present at this meeting, it is desirable that the necessary steps should now be taken for the formation of a Joint Smoke Abatement Board for the area of the authorities represented at this meeting.
- (2) That a copy of this resolution be forwarded to the several authorities represented at this meeting, and that such authorities be asked to adopt a resolution approving the proposal to form a Board.
- (3) That a committee be formed for the purpose of considering the preparation of the scheme for the formation of the Board referred to, and that such committee should consist of one representative of each of the authorities approving the proposal to form a Board.

- (4) That a further conference be convened, and that representatives of all the authorities within the area of Manchester and District Regional Smoke Abatement Committee be invited to attend, so that authorities who are not represented at this meeting may have an opportunity of agreeing to join the proposed Board.

Copies of these resolutions have been forwarded to the authorities concerned for submission to their respective Councils, and the further conference referred to will be arranged as early as possible.

SMOKE ABATEMENT CLASSES.

An elementary course specially arranged for boiler firemen at the instance of the Regional Committee was again held at the Manchester Municipal College of Technology during the session 1936-37. Forty-eight students enrolled for the course. Of these, 34 sat for the examination, 25 of whom satisfied the examiners and were awarded certificates by the Regional Committee.

In addition to the elementary classes more advanced courses were held, particulars of which are as follows :—

Second year course .. 69 students enrolled.
 39 sat for the examination,
 29 of whom satisfied the examiners.

Third year course .. 24 students enrolled.
 7 sat for the examination,
 5 of whom satisfied the examiners.

An examination in boiler-house practice, under the auspices of the City and Guilds of London Institute, was also held. Eighteen students sat for this examination : of these 5 obtained first-class passes, 6 second-class passes, and 7 failed.

Similar classes are being held during the session 1937-38 at Manchester, also a well-attended elementary course is being held under the auspices of the Health Committee at Warrington, at the close of which an examination will be held and certificates awarded to the candidates who satisfy the Regional Committee's Examination Board.

Mr. Duguid, the member who represents the Committee on the City and Guilds of London Institute, submitted the following facts as a result of examinations held by that body. These are included here as evidence

of the spreading estimation of the value of trained stokers throughout the country :—

CITY AND GUILDS OF LONDON INSTITUTE.
Department of Technology.
BOILER HOUSE PRACTICE.
Examination Results, 1937.
Comparison with 1936.

Home or Overseas	Year	Number of Candidates	1st Class Pass	2nd Class Pass	Fail	Percentage of Failures
Home ..	1937	117	31	49	37	32
	1936	108	37	45	26	24
Overseas ..	1937	3	1	1	1	33
	1936	4	1	2	1	25

WINNER OF INSTITUTE'S BRONZE MEDAL :
H. Bancroft, Municipal Technical College, Halifax.
LIST OF CENTRES WITH NUMBER OF CANDIDATES.

Great Britain—

Bolton	4
Liverpool	4
Manchester	18
L.C.C.	9
Borough Polytechnic	5
Newcastle-on-Tyne	1
Birmingham	1
Batley	2
Bradford	6
Halifax	6
Huddersfield	14
Leeds	11
Rotherham	2
Sheffield	15
Glasgow	19

India—

Gwalior	2
Lahore	1
Total	120

Co-operation with H.M. Alkali Department.

Mr. H. G. Howson, H.M. Inspector of Alkali, etc., Works for this area, has continued his membership of the Executive Committee with a view to any collaboration with his department which is desirable, in accordance with the recommendation of the Ministry of Health.

Co-operation with the Coal Utilisation Council.

Reference was made in last year's report to the valuable help which had been rendered to the Committee by the excellent work carried out by the Coal Utilisation Council. Mr. P. D. Kirkman, the Council's Combustion Engineer and representative for this area, who is in charge of the very interesting and instructive exhibition of coal-burning appliances, 38, Deansgate, Manchester, has informed the Honorary Secretary that the requests for his services are constantly increasing. There is no doubt that the expert advice which he is able to give the manufacturers must result in greater efficiency in the working of their boiler plant, with lower fuel costs and reduction of smoke emission, and it is evident that the efforts of the Council in this direction are having a very good effect, which is appreciated as much by the manufacturers themselves as it is by the Regional Committee.

Smoke Abatement Appliances.

The attention of the Committee has again been drawn to a number of appliances designed to reduce smoke emission, and these are at present being investigated.

Annual Conference of the National Smoke Abatement Society.

This conference was held at Leeds on September the 30th to October 2nd, 1937, and the Committee was represented by Councillors R. H. Cunliffe, J. Bardsley, and J. W. Davenport. Alderman W. T. Jackson and the Honorary Secretary also attended on behalf of the Manchester Public Health Committee.

A paper by the Honorary Secretary entitled "Manchester and District Regional Smoke Abatement (Advisory) Committee" was read at the conference. In this a short history of the work of the Committee from its inception in 1924 up to date was given, together with a summary of the case at present being presented by the Committee to the authorities concerned with a view to the establishment of a joint smoke abatement board, the urgent need for which being specially emphasised.

Notes on the work of the Regional Committee are supplied to the Society from time to time for insertion in their quarterly journal, copies of which are forwarded to each Medical Officer of Health of authorities affiliated to the Regional Committee and to members of the Executive Committee.

Councillor R. H. Cunliffe, J.P.

The Committee will much regret the loss of Councillor Cunliffe, of Farnworth, who has been the Deputy Chairman of the Committee since its inception, whose death took place in December. Councillor Cunliffe was a most enthusiastic worker in the cause of smoke abatement for many years, and had rendered most valuable help in the work of the Committee.

Membership.

At the close of the year the number of authorities affiliated to the Committee was 56, the same as last year.

R. VEITCH CLARK,
Honorary Secretary.

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